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FN207. Id. at 151-52.

FN208. Id.

FN209. Id.

FN210. Id. at 152.

FN211. See id.

FN212. See id.

FN213. Id.

FN214. Id. at 148.

FN215. Id.

FN216. See id.

FN217. See Kemmler III, 7 N.Y.S. 813 (Sup.Ct.1889).

FN218. Id. at 813.

FN219. See id. at 814.

FN220. Id.

FN221. See id. at 814-15.

FN222. Id. at 815.

FN223. Id.

FN224. See id.

FN225. Id.

FN226. Id.

FN227. Id. at 815-16.

FN228. See id. at 816.

FN229. Id.

FN230. Id.

FN231. See id. at 817.

FN232. Id.

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FN233. See id. at 817-18.

FN234. Id. at 818.

FN235. See id.

FN236. Id.

FN237. Id.

FN238. Id.

FN239. See id.

FN240. Id. The court declared: [I]n all such [failing] cases [of electrocution] the effects mentioned have evidently been due to lack of force in the current received, or to the imperfect manner of its application to the body of the victim; and the general result of these demonstrations, in the light of the scientific evidence in this case, is, as we think, to remove every reasonable doubt that the passage of a current of electricity of a certain well-determined intensity through the vital parts of the human body, under chosen conditions of contact and resistance, must result in instant death. If the question here were of the wisdom and advisability of the proposed change in the mode of inflicting the death penalty, the discussion might be prolonged. As we are confined to the question of the constitutionality of the statute which introduces the change, we deem further discussion unnecessary for the presentation of our views. Id.

FN241. See id.

FN242. *Kemmler IV*, 24 N.E. 6 (N.Y.1890).

FN243. See id. at 7-8. The court discussed these conclusions and rationales as follows: (1) the Electrocution Act did not violate any provision of the New York state constitution; (2) courts have the power under the provision of the state constitution (N.Y. CONST. art. I, § 5) to declare void any legislative act prescribing cruel and unusual punishment; (3) the legislature has the authority, however, to change the manner and mode of inflicting the death penalty; (4) whether the use of electricity constituted a more humane method of execution than the type of method used previously was a question to be determined conclusively by the legislature; (5) the courts are not empowered to review proof regarding the constitutionality of a statute, and external testimony by experts or others is not admissible to show that some provision of the constitution may be violated; (6) the statute must appear to be unconstitutional from the language of the law itself; and (7) when reviewing a writ of habeas corpus where the petitioner has been sentenced and detained, it is the court's duty to remand him unless it can be shown that the trial court was without jurisdiction to pass the sentence. See id.

FN244. Id. at 8.

FN245. See id.

FN246. Id.

FN247. Id.

FN248. See id. at 7-8.

FN249. See id. at 8.

FN250. Id.

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FN251. Id. at 8-9.

FN252. Id. at 9.

FN253. *In re Kemmler*, 136 U.S. 436 (1890).

FN254. See id. at 445-46.

FN255. See id. at 449.

FN256. The Court declared: It is not contended, as it could not be, that the Eighth Amendment was intended to apply to the States, but it is urged that the provision of the Fourteenth Amendment, which forbids a State to make or enforce any law which shall abridge the privileges or immunities of citizens of the United States, is a prohibition on the State from the imposition of cruel and unusual punishments, and that such punishments are also prohibited by inclusion in the term "due process of law." Id. at 446.

FN257. See id. at 445-46.

FN258. See *infra* notes 430-32 and accompanying text.

FN259. *Kemmler*, 136 U.S. at 446.

FN260. 99 U.S. 130, 135 (1878); see *Kemmler*, 136 U.S. at 447.

FN261. *Kemmler*, 136 U.S. at 447 (quoting *Wilkerson*, 99 U.S. at 136).

FN262. See *infra* notes 459-66 and accompanying text.

FN263. *Kemmler*, 136 U.S. at 447.

FN264. Id.

FN265. See id.

FN266. Id.

FN267. Id. at 448.

FN268. Id. at 449.

FN269. Id.

FN270. See id.

FN271. Id.

FN272. See *Furman v. Georgia*, 408 U.S. 238, 323 (1972) (Marshall, J., concurring).

FN273. See *Kemmler IV*, 24 N.E. 6, 8 (N.Y.1890).

FN274. Id.

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FN275. See *id.*

FN276. See *id.* at 8-9.

FN277. *Id.* at 9.

FN278. See *Kemmler II*, 7 N.Y.S. 145, 149 (Cayuga County Ct.1889).

FN279. See generally *Kemmler II* Transcript, *supra* note 37, at 368-98.

FN280. See *id.* at 623-54.

FN281. See *id.* at 2-107.

FN282. See *Kemmler III*, 7 N.Y.S. 813, 815 (Sup.Ct.1889); *Kemmler II*, 7 N.Y.S. at 148.

FN283. See *Kemmler II*, 7 N.Y.S. at 148.

FN284. See *supra* notes 54-61 and accompanying text.

FN285. See *supra* notes 88-145 and accompanying text.

FN286. See *supra* notes 163-95 and accompanying text.

FN287. G.R.N. Jones, *Judicial Electrocution and the Prison Doctor*, 335 LANCET 713, 713 (1990) (citation omitted).

FN288. *Kemmler II*, 7 N.Y.S. at 148-49.

FN289. See *supra* notes 214-16 and accompanying text.

FN290. See *id.*

FN291. See *id.*

FN292. Cf. *Beck v. Alabama*, 447 U.S. 625, 637-38 (1980) (striking down Alabama's practice of requiring the jury to convict or acquit a defendant of a capital offense without considering the alternative of convicting for a lesser included offense). Since *Kemmler*, the results of public opinion polls have shown that the public would be more likely to reject the death penalty if life imprisonment without parole was provided as an optional punishment. See Derrick Milam, *Capital Punishment and Perception: Public Opinion and Its Influence*, in *A DECADE OF CAPITAL PUNISHMENT IN NEW JERSEY* 109, 111 (1992) (Policy Conference Final Report, on file at the Woodrow Wilson School of Public and International Affairs, Princeton University) (quoting a 1991 Gallup Poll). For example, public support for the death penalty would "decline dramatically" if life imprisonment, with no possibility of parole, was a certain punishment for convicted murderers. See *id.*; Stephanie Griffith & Stephen Buckley, *Two Different Death Penalty Decisions: Agonizing in the Jury Room*, WASH. POST, Aug. 4, 1991, at B1 (explaining that the relatively higher number of executions in Virginia compared to other states was attributable to the fact that juries in Virginia had an alternative choice only of life imprisonment and not the sentence of life without parole). Others point to evidence that some death penalty supporters "would change their minds if there was convincing evidence against deterrence." Samuel Cameron, *The Demand for Capital Punishment*, 13 INT'L REV.L. & ECON. 47, 53 (1993); see also Austin Sarat & Neil Vidmar, *Public Opinion, the Death Penalty, and the Eighth Amendment: Testing the Marshall Hypothesis*, 1976 WIS.L.REV. 171, 187-97 (providing empirical support for Justice Marshall's argument in *Furman v. Georgia*, 408 U.S. 238 (1972), that a public better informed about the death penalty would tend to reject it as punishment unless retribution serves as the basis for death penalty support, in which case more information is irrelevant).

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FN293. See Brief of Attorney-General at 65-67, *Kemmler II*, 7 N.Y.S. 145 (Cayuga County Ct.1889). "The validity of a statute is not affected by an amendment which is unconstitutional. The amendment is void and does not, by implication, repeal the original act." *Id.* at 65 (citation omitted); see also *United States v. Chandler*, 996 F.2d 1073, 1096 (11th Cir.1993) (noting in a similar context that "[f]uture legislation would not increase the punishment, but would only provide for the method by which the punishment would be carried out; a change in procedure, not the sentence").

FN294. 4 WILLIAM BLACKSTONE, COMMENTARIES \*406.

FN295. 99 U.S. 130 (1878).

FN296. See *In re Kemmler*, 136 U.S. 436, 446-47 (1890) (citing several methods of execution that the Court might find prohibited by the Eighth Amendment).

FN297. Margaret J. Radin, *The Jurisprudence of Death: Evolving Standards for the Cruel and Unusual Punishments Clause*, 126 U.P.A.L.REV. 989, 997 (1978).

FN298. *Glass v. Louisiana*, 471 U.S. 1080, 1083 (1985) (Brennan, J., dissenting) (quoting *Weems v. United States*, 217 U.S. 349, 372 (1910)).

FN299. *Kemmler*, 136 U.S. at 447.

FN300. See, e.g., *Kemmler II*, 7 N.Y.S. 145, 150-52 (Cayuga County Ct.1889).

FN301. See BARBARA J. SHAPIRO, *BEYOND REASONABLE DOUBT AND PROBABLE CAUSE* 1-41 (1991).

FN302. According to Syvasky Poyner's attorneys, a preponderance of the evidence standard would be required for establishing an Eighth Amendment violation. See Syvasky L. Poyner, *Petition for Temporary Reprieve 7* (undated) (submitted by McGuire, Woods, Battle & Boothe and Hunton & Williams to the Supreme Court of Virginia) [hereinafter *Poyner Reprieve*]; see also *Blake v. Hall*, 668 F.2d 52, 57-58 (1st Cir.1981) (discussing the appropriate standard applicable in determining whether cell conditions at a prison constituted cruel and unusual punishment), cert. denied, 456 U.S. 983 (1982); *McGill v. Duckworth*, 726 F.Supp. 1144, 1148-49 (N.D.Ind.1989) (discussing the applicability of the preponderance of the evidence standard in suits against prison officials for failing to protect a prison inmate from attack by another inmate), aff'd in part and rev'd in part, 944 F.2d 344 (7th Cir.1991), cert. denied, 112 S.Ct. 1265 (1992).

FN303. See *In re Kemmler*, 136 U.S. 436, 446 (1890).

FN304. 370 U.S. 660 (1962).

FN305. See *id.* at 666-67 (holding that a California statute which made the addiction to the use of narcotics a criminal offense could result in a cruel and unusual punishment in violation of the Fourteenth Amendment); see also Radin, *supra* note 293, at 997 n. 28.

FN306. See *Trop v. Dulles*, 356 U.S. 86 (1958); *Louisiana ex rel. Francis v. Resweber*, 329 U.S. 459 (1947); *Badders v. United States*, 240 U.S. 391 (1916); *Weems v. United States*, 217 U.S. 349 (1910); *Howard v. Fleming*, 191 U.S. 126 (1903); *O'Neil v. Vermont*, 144 U.S. 323, 339-41, 370-71 (1892) (Field, J., and Harlan & Brewer, JJ., dissenting); *In re Kemmler*, 136 U.S. 436 (1890); *Wilkerson v. Utah*, 99 U.S. 130 (1878); *Pervear v. Massachusetts*, 72 U.S. (5 Wall.) 475 (1867).

FN307. *Far Worse Than Hanging*, *supra* note 20, at 2 ("[A]n awful botch" was a statement in a telegram sent by one of the electricians operating Kemmler's electric chair to Westinghouse officials, immediately after Kemmler's

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execution.).

FN308. Leyden, *supra* note 26, at D5.

FN309. In Abject Terror, *UTICA SATURDAY GLOBE*, July 26, 1890, at 8.

FN310. See Hughes, Executioner's Current, *supra* note 88, at 161-62. A series of articles in the *Utica Saturday Globe* illustrate these critical reactions. See, e.g., Against Electrocution, *UTICA SATURDAY GLOBE*, Dec. 7, 1889, at 8 (describing the movement to repeal the Electrocution Act); Doesn't Favor Electrocution, *UTICA SATURDAY GLOBE*, June 14, 1890, at 3 (quoting Abbe Faure, Chaplain of the Roquette Prison, Paris, France, who stated that electrocution "is opposed to every principle of humanity"); In the Kemmler Case, *UTICA SATURDAY GLOBE*, June 29, 1889, at 8 (presenting the arguments by Bourke Cockran, Kemmler's attorney, concerning the extent of suffering electrocution could cause); The Death Penalty, *UTICA SATURDAY GLOBE*, June 7, 1890, at 3 (quoting M. Beauquesne, Director of the Roquette Prison, Paris, France, on the cruelty of electricity because of the amount of time required to prepare the prisoner for death).

FN311. To Prevent Electrocution, *UTICA SATURDAY GLOBE*, June 21, 1890, at 8.

FN312. See Hughes, Executioner's Current, *supra* note 88, at 162 (discussing efforts by the electrical industry to discredit the use of electricity in executions).

FN313. The Last of Kemmler, *supra* note 156, at 1, 4.

FN314. Details on the preparation and results of the Kemmler execution can be found in a number of sources. See, e.g., ROBERT G. ELLIOTT, *AGENT OF DEATH* 23-29 (1940); LEWIS E. LAWES, *LIFE AND DEATH IN SING SING* 24-29 (1940); Bernstein, *supra* note 95, at 54-58; Carlos F. MacDonald, M.D., The Infliction of the Death Penalty by Means of Electricity: Being a Report of Seven Cases, 55 *N.Y.MED.J.* 535, 535-36 (1892); The Execution of Kemmler by Electricity, 16 *ELECTRICAL WORLD* 99, 99-100 (1890); Far Worse Than Hanging, *supra* note 20, at 1-2.

FN315. See ELLIOTT, *supra* note 314, at 23-29; Far Worse Than Hanging, *supra* note 20, at 1.

FN316. The reports of the electrocution do not mention whether Kemmler received a mask. See The Last of Kemmler, *supra* note 156, at 1, 4; Amos O. Squire, Observations Made at Electrocutions of 114 Men at Sing Sing Prison, Sept. 17, 1923, at 2 (Paper read before the American Prison Physician's Association, Boston). Generally, details of electrocutions are not widely known. *Glass v. Louisiana*, 471 U.S. 1080, 1086 n. 12 (1985) (Brennan, J., dissenting). According to one account of Kemmler's electric chair, "[t]he electrodes were ball shaped rubber cups, about four inches in diameter. In this cup was a metallic disk, faced with a layer of sponge. This was fastened around the prisoner's abdomen by a broad strap to render a secure contact." Squire, *supra*, at 2; see also AMOS O. SQUIRE, *SING SING DOCTOR* 213-21 (1937) (describing electrocution procedures at Sing Sing). See generally DON REID, *EYEWITNESS* (1973) (describing procedures in a Department of Corrections in Huntsville, Texas). For other details on the design and construction of the chair used to execute Kemmler, see Fell, *supra* note 146, at 442-45.

FN317. Bernstein, *supra* note 95, at 56.

FN318. See *id.* at 57.

FN319. Far Worse Than Hanging, *supra* note 20, at 1. According to Squire, the electric chair provided a range from 30 to 1680 volts, although the record did not show the voltage or amperage that was applied at Kemmler's execution. See Squire, *supra* note 316, at 2.

FN320. Leyden, *supra* note 26, at D5.

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FN321. Squire, *supra* note 316, at 2.

FN322. See *Far Worse Than Hanging*, *supra* note 20, at 1. One New York Times reporter described the incident in detail: After the first convulsion there was not the slightest movement of Kemmler's body.... Then the eyes that had been momentarily turned from Kemmler's body returned to it and gazed with horror on what they saw. The men rose from their chairs impulsively and groaned at the agony they felt. "Great God! he is alive?" some one said; "Turn on the current," said another.... Again came that click as before, and again the body of the unconscious wretch in the chair became as rigid as one of bronze. It was awful, and the witnesses were so horrified by the ghastly sight that they could not take their eyes off it. The dynamo did not seem to run smoothly. The current could be heard sharply snapping. Blood began to appear on the face of the wretch in the chair. It stood on the face like sweat.... An awful odor began to permeate the death chamber, and then, as though to cap the climax of this fearful sight, it was seen that the hair under and around the electrode on the head and the flesh under and around the electrode at the base of the spine was singeing. The stench was unbearable. *Id.*

FN323. See Leyden, *supra* note 26, at D5; *Far Worse Than Hanging*, *supra* note 20, at 1. This assessment was contradicted by others. Others of the men of science say that the wretch must have suffered agonies beyond the power of the human mind to conceive; that a person whose body should be shaken into fragments could not have suffered as much pain as did Kemmler, whose nerve cells and tissues were disintegrated, not in a flash as was designed, but by the relatively slow strokes of the electric hammer upon them. *The Last of Kemmler*, *supra* note 156, at 1.

FN324. *Far Worse Than Hanging*, *supra* note 20, at 1; see also *Kemmler's Remains*, *UTICA SATURDAY GLOBE*, Aug. 16, 1890, at 4 (describing the autopsy results of Kemmler's brain and heart).

FN325. *The Last of Kemmler*, *supra* note 156, at 4 (quoting Dr. George F. Shrady, one of the doctors who witnessed the electrocution and performed the autopsy).

FN326. *Id.*

FN327. See *id.*

FN328. *Far Worse Than Hanging*, *supra* note 20, at 2.

FN329. See *id.*

FN330. *Id.* Initially, officials said that the current applied to Kemmler was 1,500 volts. A number of incandescent lamps using the same circuit, however, were kept burning during the execution, possibly reducing the current to less than 1,000 volts. See *The Last of Kemmler*, *supra* note 156, at 4.

FN331. *Far Worse Than Hanging*, *supra* note 20, at 2. Notably, Southwick was not aware of what "ordinary resistance" was because electrocution had never before been conducted on a human being in this manner. *Id.*

FN332. See *Mr. Edison on the Kemmler Execution*, *supra* note 105, at 105.

FN333. *Id.*

FN334. *Id.*

FN335. See *The Last of Kemmler*, *supra* note 156, at 4.

FN336. If the Belt Had Come Off, *UTICA SATURDAY GLOBE*, Aug. 16, 1890, at 2. According to Barnes, "[t]he Kemmler execution was a decided failure ... but if managed properly it might have been a success." *Id.*



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FN337. See *Far Worse Than Hanging*, supra note 20, at 2.

FN338. See *id.*

FN339. *Id.*

FN340. See *The First Electrocution*, UTICA SATURDAY GLOBE, Aug. 9, 1890, at 4 ("In London, Paris, Berlin and Vienna the populace eagerly awaited the meagre details and in our own country it attained an importance almost rivalling the result of a Presidential election.").

FN341. See BERKSON, supra note 83, at 25.

FN342. See *id.*; see also Dickinson, supra note 148, at 8 (explaining that the prohibition on "any publication of the details of the execution met with universal condemnation from the press").

FN343. Leyden, supra note 26, at D5 (citation omitted).

FN344. *Id.* (citation omitted).

FN345. *Id.* (citation omitted).

FN346. *Far Worse Than Hanging*, supra note 20, at 1.

FN347. *Some Press Comments*, UTICA SATURDAY GLOBE, Aug. 16, 1890, at 8. According to one commentator, "[i]t is true that there is no account of writhings or contortions of a poor wretch dangling in the air, but we have the details of the electric current." *Id.*

FN348. *Far Worse Than Hanging*, supra note 20, at 2.

FN349. *Id.*

FN350. *Id.*

FN351. See *A Westinghouse View of the Execution*, 16 ELECTRICAL WORLD 105, 105 (1890).

FN352. See *id.*

FN353. See Notes, 4 HARV.L.REV. 287, 287 (1891).

FN354. See BERKSON, supra note 83, at 25-26.

FN355. See *id.* at 25.

FN356. *Not As Bad As Pictured*, UTICA SATURDAY GLOBE, Sept. 6, 1890, at 7; see also *Kemmler's Blood*, UTICA SATURDAY GLOBE, Feb. 27, 1892, at 2.

FN357. *The Last of Kemmler*, supra note 156, at 4; *Mr. Edison on the Kemmler Execution*, supra note 105, at 105. However, Dr. Fell, who had conducted much of the experimentation on electrocution, thought Edison was wrong. He explained that an initial current through the brain would at least cause unconsciousness, whereas a second current applied through the hands, which Edison favored, would not even produce that. *Id.*

FN358. Bernstein, supra note 95, at 57.



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FN359. See *Far Worse Than Hanging*, supra note 20, at 2.

FN360. See Reynolds & Bernstein, supra note 85, at 24; Execution by Electricity, N.Y. TIMES, Feb. 9, 1892, at 4 (referring to the "silly prohibition of newspaper reports").

FN361. Reynolds & Bernstein, supra note 85, at 24.

FN362. See id.; see also MacDonald, supra note 314, at 535-42 (describing the autopsies in detail).

FN363. See Reynolds & Bernstein, supra note 85, at 25; see also Arnold Beichman, *The First Electrocuting*, 35 COMMENTARY 410, 418-19 (1963).

FN364. See Reynolds & Bernstein, supra note 85, at 25.

FN365. Id.

FN366. Id.

FN367. See id.

FN368. Id.

FN369. See id.

FN370. Id.; see W.J. Jenks, *Electrical Execution*, 55 N.Y.MED.J. 542, 542-44 (1892); Arthur Kennelly, *Physiological Observations at the McIlvaine [sic] Electrocuting*, 13 ELECTRICAL ENGINEER 157, 157-58 (1892).

FN371. See Reynolds & Bernstein, supra note 85, at 25.

FN372. See id. at 26.

FN373. See *Malloy v. South Carolina*, 237 U.S. 180, 185 n. 1 (1915). For a history of the development of electrocution in Florida, see Driggs, supra note 63, at 1176-90.

FN374. Garner, supra note 116, at 626.

FN375. For example, on August 27, 1893, three years after the Kemmler execution, New York's execution of William G. Taylor was botched when the electric chair broke after the execution started. William G. Taylor was strapped into New York's electric chair, condemned for killing a fellow inmate. When the electricity hit him, his legs stiffened and ripped off the front of the chair where his ankles were strapped. With no support, the chair fell on its face with Taylor still strapped in it. The warden screamed for the electricity to be turned off and everyone scurried about as a group of witnesses lifted the chair. Taylor was still alive! An old wooden box was found to support the chair. The switch was thrown again. Nothing happened. The generator had burned up. The warden ordered Taylor unstrapped and placed on a cot where doctors administered drugs for pain.... Electricians frantically ran new power lines over the prison walls from the city's electrical system. By the time they were ready, Taylor had died on the cot. However, court officials determined that the law hadn't been carried out. The warden ordered the dead man back into the damaged chair. The current, such as it was, was turned on for 30 seconds. When it was over the warden wiped his brow and announced: "Gentlemen, justice has been done." Ron Wikberg, *Death Watch: The Horror Show*, ANGOLITE, Sept.-Oct. 1990, at 25, 29 (quoting Roger Thomas, *History of Angola (The Electric Chair)*, June 15, 1988); see also ROBERT G. ELLIOTT & ALBERT R. BEATTY, *AGENT OF DEATH* 29-31 (1940). There were also accounts of individuals who were revived after their electrocution. One notable example was the electrocution of Frederick Van Wormer at a state prison in Clinton, New York. See Dave von Drehle, *End Nearing for Death Row's No. 1 Killer*; Ted Bundy

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Makes His Last Stand, MIAMI HERALD, Dec. 11, 1988, at 1A. In 1903, Van Wormer was on the autopsy table and the executioner was enroute home when Van Wormer started showing signs of distress and doctors realized that he was still alive. Although the executioner was summoned back, Van Wormer died before they could put him back into the chair. See Bob Keeler, Is New York Ready to Kill Again?, NEWSDAY, Sept. 19, 1982 (Magazine), at 10, 36. According to one doctor at the time, the cause of death for most persons who were electrocuted was not the actual electrocution but the autopsy that followed, because he believed some of the convicts who were electrocuted were actually still alive but unconscious. See A Ghastly View of Electrical Execution, 68 N.Y.MED.J. 487, 487 (1898).

FN376. BERKSON, *supra* note 83, at 26 n. 47.

FN377. See generally Deborah W. Denno, The History of the Death Penalty in New York, Paper Presented at the Albany Law Review Symposium on the Death Penalty (April 1991) (manuscript on file with the author) (analyzing all cases that have cited Kemmler).

FN378. 237 U.S. 180 (1915).

FN379. See *id.* at 185.

FN380. *Id.* (noting that New York's appointed Commission was "to ascertain the most humane and practical method of inflicting the death sentence reported in favor of electrocution").

FN381. See *id.* at 184 ("I do not consider any law *ex post facto*, within the prohibition, that mollifies the rigor of the criminal law; but only those that create, or aggravate, the crime; or increase the punishment, or change the rules of evidence, for the purpose of conviction.") (quoting *Calder v. Bull*, 3 U.S. (3 Dall.) 386, 390 (1798)).

FN382. 329 U.S. 459 (1947) (plurality opinion).

FN383. See ARTHUR S. MILLER & JEFFREY H. BOWMAN, DEATH BY INSTALLMENTS: THE ORDEAL OF WILLIE FRANCIS 16-27 (1988); Arthur S. Miller & Jeffrey H. Bowman, "Slow Dance on the Killing Ground": The Willie Francis Case Revisited, 32 DEPAUL L.REV. 1, 4-5 (1983).

FN384. MILLER & BOWMAN, *supra* note 383, at 27.

FN385. *Id.* at 6. This practice has since changed.

FN386. See BERKSON, *supra* note 83, at 26.

FN387. See *id.*

FN388. Commentators have noted that it makes no sense to refer to this case as *Resweber*, the name most commonly used by the courts and commentators, because Harold Resweber was the Sheriff. See Lonny J. Hoffman, Note, The Madness of the Method: The Use of Electrocution and the Death Penalty, 70 TEX.L.REV. 1039, 1040 n. 10 (1992); see also MILLER & BOWMAN, *supra* note 383, at 1 (also shunning the *Resweber* abbreviation).

FN389. Francis, 329 U.S. at 460.

FN390. *Id.* at 480 n. 2 (Burton, J., dissenting) (quoting Brief for Petitioner app. 5). According to another account of Francis' experience, Francis said he felt as if he was being cut and pricked by hundreds, no thousands, of razor-sharp needles and pins. His left leg ached, then his arms. [His] body tensed and his lips puffed out. Soon, his whole body began involuntarily jumping and straining at the straps. MILLER & BOWMAN, *supra* note 383, at 9.

FN391. See MILLER & BOWMAN, *supra* note 383, at 9-10.

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FN392. BERKSON, *supra* note 83, at 27.

FN393. See Francis, 329 U.S. at 461. This Article does not examine Francis' argument of a denial of due process because of the double jeopardy provision of the Fifth Amendment. See *id.*

FN394. For example, even the dissent assumed that death by a "lawful electrocution" could be "instantaneous." *Id.* at 474 (Burton, J., dissenting).

FN395. See *id.* at 461; see also *Glass v. Louisiana*, 471 U.S. 1080, 1085 n. 10 (1985) (Brennan, J., dissenting from denial of certiorari); Martin R. Gardner, *Executions and Indignities--An Eighth Amendment Assessment of Methods of Inflicting Capital Punishment*, 39 OHIO ST.L.J. 96, 101 (1978); Hoffman, *supra* note 388, at 1046.

FN396. See Francis, 329 U.S. at 466.

FN397. Justice Reed, who wrote the plurality opinion denying Francis' request, was joined by Justices Vinson, Black, and Jackson. Justices Burton, Douglas, Murphy, and Rutledge contended that a second attempt at execution would be cruel and unusual. See *id.* at 479 (Burton, J., dissenting). Justice Frankfurter's concurrence cast the fifth and deciding vote against Francis. See *id.* at 471-72 (Frankfurter, J., concurring). The four plurality Justices contended that even if the Eighth Amendment did apply to the states, a second execution attempt could be authorized. See *id.* at 463-64 (plurality opinion). The four dissenting Justices strongly suggested otherwise. See *id.* at 474-77 (Burton, J., dissenting). Only Justice Frankfurter's concurrence directly stated that the Eighth Amendment did not apply to the states. See *id.* at 470 (Frankfurter, J., concurring).

FN398. *Id.* at 462 (plurality opinion).

FN399. *Id.* at 463.

FN400. *Id.* at 464.

FN401. *Id.* at 462; see also *infra* notes 411-14 and accompanying text (noting that evidence that Francis' execution was not performed properly was never brought before the Court).

FN402. Francis, 329 U.S. at 462.

FN403. See *id.* at 464.

FN404. *Id.*

FN405. *Id.* at 480-81 (Burton, J., dissenting).

FN406. *Id.* at 474.

FN407. See *id.*

FN408. See *id.* at 477.

FN409. See *id.*

FN410. *Id.*

FN411. See MILLER & BOWMAN, *supra* note 383, at 7.

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FN412. *Id.*

FN413. *Id.* As Francis left his cell to return home, one of the two men shook his fist at Francis, shouting "I missed you this time, but I'll get you next week if I have to use a rock." *Id.* at 11.

FN414. See Francis, 329 U.S. at 480 n. 2 (Burton, J., dissenting) (quoting Brief for Petitioner app. 5).

FN415. *Id.* at 465 (plurality opinion).

FN416. See Hoffman, *supra* note 388, at 1048.

FN417. *Id.*

FN418. See Francis, 329 U.S. at 464 (plurality opinion).

FN419. See *id.*

FN420. *Id.* at 477 (Burton, J., dissenting).

FN421. See *id.* at 476.

FN422. See *id.*

FN423. *Id.* at 471 (Frankfurter, J., concurring).

FN424. Triple Jeopardy, L.A. DAILY J., Apr. 27, 1983, at 4; see also *infra* parts IV-V (citing commentators who argue that the question of whether botched electrocutions constitute an unconstitutionally cruel punishment already has been implicated).

FN425. See, e.g., BERKSON, *supra* note 83, at 28-29; Jacob Balick, Recent Cases, 20 TEMPLE L.Q. 584 (1947); Norman L. Schatz, Recent Decisions, 31 MARQ.L.REV. 108 (1947).

FN426. See Francis, 329 U.S. at 463 n. 4 (plurality opinion); *id.* at 476 (Burton, J., dissenting) (" 'Punishments are cruel when they involve torture or a lingering death ... something more than the mere extinguishment of life.' ") (quoting Kemmler, 136 U.S. 436, 447) (1890)).

FN427. See, e.g., Gardner, *supra* note 395, at 102.

FN428. See Francis, 329 U.S. at 474 (Burton, J., dissenting).

FN429. 370 U.S. 660 (1962).

FN430. *Id.* at 666.

FN431. 408 U.S. 238 (1972).

FN432. *Id.* at 241 (Douglas, J., concurring).

FN433. See *Harmelin v. Michigan*, 111 S.Ct. 2680, 2681-91 (1991), which contains a thorough analysis of Eighth Amendment jurisprudence, although not in the context of execution methods. In *Harmelin*, the Court held that the imposition of a mandatory sentence of life imprisonment without possibility of parole was not cruel and unusual punishment for the petitioner's crime of possessing more than 650 grams of cocaine. See *id.* at 2701. The state court

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that gave the sentence did not consider any mitigating factors, such as the petitioner's lack of prior felony convictions. See *id.*

FN434. *Weems v. United States*, 217 U.S. 349, 378 (1910).

FN435. *Id.* at 373.

FN436. *Stanford v. Kentucky*, 492 U.S. 361, 369 (1989) (quoting *Gregg v. Georgia*, 428 U.S. 153, 171 (1976) (plurality opinion of Stewart, Powell, and Stevens, JJ.)).

FN437. *Trop v. Dulles*, 356 U.S. 86, 101 (1958) (plurality opinion).

FN438. *Furman*, 408 U.S. at 270 (Brennan, J., concurring) (alteration in original) (quoting *Trop*, 356 U.S. at 100 (plurality opinion)).

FN439. *Robinson v. California*, 370 U.S. 660, 666 (1962).

FN440. *Furman*, 408 U.S. at 270 (Brennan, J., concurring) (quoting *Trop*, 356 U.S. at 100 (plurality opinion)).

FN441. *Francis*, 329 U.S. at 464 (plurality opinion).

FN442. 471 U.S. 1080 (1985).

FN443. See *id.*

FN444. See *id.* at 1080 (Brennan, J., dissenting from denial of certiorari).

FN445. See *id.* at 1083.

FN446. *Id.* at 1085.

FN447. *Id.* at 1084 (citing *Gregg*, 428 U.S. at 173; *Francis*, 329 U.S. at 463 (plurality opinion); *In re Kemmler*, 136 U.S. 436, 447 (1890); *Wilkerson v. Utah*, 99 U.S. 130, 135-36 (1879)).

FN448. *Id.* at 1085 (quoting *Trop v. Dulles*, 356 U.S. 86, 100 (1958) (plurality opinion)).

FN449. *Id.* at 1085 (citing ROYAL COMMISSION ON CAPITAL PUNISHMENT, 1949-1953 REPORT ¶ 732 (1953)).

FN450. *Id.* at 1086 (quoting *Kemmler*, 136 U.S. at 447).

FN451. *Id.*

FN452. See *id.* at 1086 n. 12.

FN453. See *id.* at 1086. For example: Witnesses routinely report that, when the switch is thrown, the condemned prisoner "cringes," "leaps," and "fights the straps with amazing strength." "The hands turn red, then white, and the cords of the neck stand out like steel bands. The prisoner's limbs, fingers, toes, and face are severely contorted. The force of the electric current is so powerful that the prisoner's eyeballs sometimes pop out and "rest on [his] cheeks." The prisoner often defecates, urinates, and vomits blood and drool.... The body frequently is badly burned and disfigured. *Id.* at 1086-87 (alteration in original) (citation omitted); see also *id.* at 1086-93 (providing further evidence that pain and violence often are inflicted during electrocution).

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FN454. *Id.* at 1093 (quoting Francis, 329 U.S. at 471 (Frankfurter, J., concurring)).

FN455. Although Kemmler did not refer specifically to the principle of the "dignity of man," one could argue that this concept was implied in its precept that an execution method must not exceed the "mere extinguishment of life." In re Kemmler, 136 U.S. 436, 447 (1890), or lead to "torture or a lingering death." *Id.* Indeed, during the hearings for Kemmler II, Edison and Brown were advised by their attorneys that the issue of mutilation was "the only argument of weight that could be brought against 'electrocide' on the score of cruel punishment." Hughes, Executioner's Current, *supra* note 88, at 161.

FN456. See, e.g., Gregg, 428 U.S. at 171 (referring to the Court's interpretation of the Eighth Amendment as "flexible and dynamic"); Trop, 356 U.S. at 101 (holding that denationalization as punishment violated the Eighth Amendment); Weems, 217 U.S. at 373 (invalidating a provision of the Philippine Penal Code providing for imprisonment and accessories disproportionate to the offense); see also Glass, 471 U.S. at 1083 (emphasizing that the Clause, to be vital, must be capable of wide application to accompany changes in the times) (quoting Weems, 217 U.S. at 373).

FN457. Glass, 471 U.S. at 1082-83 (Brennan, J., dissenting from denial of certiorari).

FN458. At early common law, precedent was particularly critical because of the dearth of statutory law and legislative policy. See William S. Laufer & Steven D. Walt, The Law and Psychology of Precedent, in HANDBOOK OF PSYCHOLOGY AND LAW 39, 40 (Dorothy K. Kagehiro & William S. Laufer eds., 1992). Over time, however, precedent "has evolved into a diverse collection of formal, informal, and often intuitive decision rules that guide trial and appellate judges in assigning weights to principles and rules extracted from prior cases." *Id.*

FN459. See generally Denno, *supra* note 377 (providing a thorough analysis of these cases and the literature on precedent). Of the 226 cases, 65 were in the Supreme Court, 29 were in an appellate court, 36 were in a district court, and 96 were in a state court. See *id.*

FN460. See Glass v. Louisiana, 471 U.S. 1080, 1081-83 (1985) (Brennan and Marshall, JJ., dissenting from denial of certiorari); Louisiana ex rel. Francis v. Resweber, 329 U.S. 459, 463 n. 4 (1947); Malloy v. State, 237 U.S. 180, 185 (1915); Funchess v. Wainwright, 788 F.2d 1443, 1446 (11th Cir.), cert. denied, 475 U.S. 1133 (1986); Sullivan v. Dugger, 721 F.2d 719, 720 (11th Cir.1983); Spinkellink v. Wainwright, 578 F.2d 582, 616 (5th Cir.1978), cert. denied, 440 U.S. 976 (1979); Squires v. Dugger, 794 F.Supp. 1568, 1580 (M.D.Fla.1992); Hamblen v. Dugger, 748 F.Supp. 1498, 1503 (M.D.Fla.1990); Thomas v. Jones, 742 F.Supp. 598, 603 (S.D.Ala.1990); Jones v. Smith, 599 F.Supp. 1292, 1297 (S.D.Ala.1984), aff'd, 772 F.2d 668 (11th Cir.1985), cert. denied, 474 U.S. 1073 (1986); Songer v. Wainwright, 571 F.Supp. 1384, 1406 (M.D.Fla.1983), aff'd, 733 F.2d 788 (11th Cir.), cert. denied, 469 U.S. 1133 (1984); Mitchell v. Hopper, 538 F.Supp. 77, 94 (S.D.Ga.1982); McCorquodale v. Balkcom, 525 F.Supp. 408, 431 (N.D.Ga.1981), aff'd in part and rev'd in part, 705 F.2d 1553 (11th Cir.1983), cert. denied, 466 U.S. 954 (1984); Boykin v. State, 207 So.2d 412, 414 (Ala.1968), rev'd, 395 U.S. 238 (1969); Stephens v. State, 580 So.2d 11, 26 (Ala.Crim.App.1990), aff'd, 580 So.2d 26 (Ala.1991); Thompson v. State, 542 So.2d 1286, 1298 (Ala.Crim.App.1988), aff'd sub nom. Ex parte Thompson, 542 So.2d 1300 (Ala.1989); Owens v. State, 531 So.2d 2, 11 (Ala.Crim.App.1986); Jackson v. State, 516 So.2d 726, 737 (Ala.Crim.App.1985); Hernandez v. State, 32 P.2d 18, 24 (Ariz.1934); Ruiz v. State, 582 S.W.2d 915, 928 (Ark.1979); Collins v. State of Arkansas, 531 S.W.2d 13, 16 (Ark.1975), vacated in part, 429 U.S. 808 (1976); People v. Anderson, 493 P.2d 880, 890 (Cal.), cert. denied, 406 U.S. 958 (1972); Ferguson v. State, 105 So. 840, 840 (Fla.1925); Godfrey v. Francis, 308 S.E.2d 806, 820 (Ga.), cert. denied, 466 U.S. 945 (1983); Collier v. State, 261 S.E.2d 364, 378 (Ga.1979), cert. denied, 445 U.S. 946 (1980); Sims v. Balkcom, 136 S.E.2d 766, 769 (Ga.1964); Johnson v. State, 584 N.E.2d 1092, 1107 (Ind.), cert. denied, 113 U.S. 155 (1992); State v. Jones, 270 So.2d 489, 501-02 (La.1972); State v. Crook, 221 So.2d 473, 476 (La.1969); State ex rel. Pierre v. Jones, 9 So.2d 42, 45 (La.), cert. denied, 317 S.Ct. 633 (1942); District Attorney v. Watson, 411 N.E.2d 1274, 1278 (Mass.1980); State v. Alvarez, 154 N.W.2d 746, 751 (Neb.1967), cert. denied, 393 U.S. 823 (1968); State v. Tomasi, 69 A. 214, 218 (N.J.1908); State v. Wallen, 254 N.E.2d 716, 723 (Ohio Ct.App.1969), aff'd, 266 N.E.2d 561 (Ohio 1971); State v. Shaw, 255 S.E.2d 799, 805 (S.C.), cert. denied, 444 U.S. 957 (1979); State v. Black, 815 S.W.2d 166, 200 (Tenn.1991); Teague v. State, 772 S.W.2d 915, 924 n. 13



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(Tenn.Crim.App.1988); *Ex parte Granviel*, 561 S.W.2d 503, 508-09 (Tex.Crim.App.1978); *R.R. v. State*, 448 S.W.2d 187, 189 n. 3 (Tex.Civ.App.1969); *Stockton v. Commonwealth*, 314 S.E.2d 371, 378 (Va.), cert. denied, 469 U.S. 873 (1984); *Martin v. Commonwealth*, 271 S.E.2d 123, 125 (Va.1980); *Hart v. Commonwealth*, 109 S.E. 582, 587 (Va.1921); *State v. Burdette*, 63 S.E.2d 69, 85 (W.Va.1950); *State v. Painter*, 63 S.E.2d 86, 94 (W.Va.1950)).

FN461. See, e.g., *Funchess*, 788 F.2d at 1446; *Sullivan*, 721 F.2d at 720; *Spinkellink*, 578 F.2d at 616; see also *Denno*, supra note 377. But see *Glass*, 471 U.S. at 1081-83 (Brennan and Marshall, JJ., dissenting from denial of certiorari) (criticizing courts' reliance on *Kemmler*); *Francis*, 329 U.S. at 474-75 (Burton, J., dissenting) (using *Kemmler* as a standard for cruelty, but not as a constitutional justification for electrocution).

FN462. The supporting state court cases were *People v. Davis*, 794 P.2d 159, 173 (Colo.1990), stay denied and cert. denied, 498 U.S. 1018 (1991); *State v. Kilpatrick*, 439 P.2d 99, 110 (Kan.1968); *Calhoun v. State*, 468 A.2d 45, 70 (Md.1983), cert. denied, 466 U.S. 993 (1984). *Hernandez v. State*, 32 P.2d 18, 24-25 (Ariz.1934) was a pre-Robinson case that cited *Kemmler* for the same proposition. In *Gray v. Lucas*, 463 U.S. 1237 (1983), the Court affirmed a Fifth Circuit decision which held that lethal gas was a constitutional method of execution. See *id.* at 1239-40. However, Justice Marshall cited *Kemmler* in his dissent in order to oppose the use of lethal gas as a method of execution, contending that it was unconstitutional because it involved a lingering death. See *id.* at 1244 (Marshall, J., dissenting). Justice Stevens similarly relied on *Kemmler* to support his dissenting argument that lethal gas violates the Eighth Amendment in *Gomez v. United States*, 112 S.Ct. 1652, 1655 (1992) (Stevens, J., dissenting), amended, 60 U.S.L.W. 3779, and stay vacated sub. nom *Vasquez v. Harris*, 112 S.Ct. 1713 (1992). But see *Gray v. Lucas*, 710 F.2d 1048, 1060 (5th Cir.) (holding that the use of lethal gas does not, as a matter of law, implicate an Eighth Amendment right), cert. denied, 463 U.S. 1237 (1983).

FN463. In *People v. Stewart*, 528 N.E.2d 631 (Ill.1988), cert. denied, 489 U.S. 1072 (1989), the court rejected the defendant's argument, based in part on *Kemmler*, that standards and procedures were needed to ensure that executions by lethal injection are not torturous, cruel, and unusual. See *id.* at 639. In *Ex parte Granviel*, 561 S.W.2d 503 (Tex.Crim.App.1978), the court held that death by lethal injection was constitutional because there was no persuasive proof that the method was cruel and inhumane. See *id.* at 510. The court also noted that possible complications with lethal injection do not constitute cruelty because discomfort is necessary to extinguish life. *Id.*

FN464. See *People v. Anderson*, 493 P.2d 880, 890-91 (Cal.), cert. denied, 406 U.S. 958 (1972) (finding that hanging, shooting and electrocution are not cruel and unusual unless disproportionate to the crime); *State v. Kilpatrick*, 439 P.2d 99, 110 (Kan.1968) (noting that under the Eighth Amendment, shooting is an authorized method of execution).

FN465. See *Anderson*, 493 P.2d at 890 (concluding that hanging, shooting, and electrocution are not cruel and unusual unless disproportionate to the crime). The court in *Deshields v. State*, 534 A.2d 630 (Del.1987), cert. denied, 486 U.S. 1017 (1988), gave a more detailed analysis: [W]e decline to rule that death by hanging is "cruel and unusual" punishment in violation of the Eighth Amendment. [Defendant] has not offered any facts for the court to conclude that hanging, if properly performed, involves the infliction of pain beyond "the mere extinguishment of life" so as to cause "unnecessary torture or a lingering death" or unneeded "terror, pain, or disgrace." Nor has [defendant] offered any evidence to establish that the procedures for hanging are so susceptible to accidents resulting in unnecessary torture or degradation that the choice of hanging as the method of death constitutes a deliberate indifference to the purposeless and needless imposition of pain and suffering. *Id.* at 640 (citations omitted); see also *Kilpatrick*, 439 P.2d at 110 (concluding that "[t]he prohibition of the Eighth Amendment does not forbid capital punishment by presently authorized methods, such as by hanging, shooting, electrocution, or gas").

FN466. *State v. Frampton*, 627 P.2d 922, 933 (Wash.1981). *Frampton* is not regarded as precedent on the issue of the constitutionality of hanging in Washington State. See *infra* notes 925-35 and accompanying text.

FN467. See *Garner*, supra note 116, at 626. Although lethal gas appears not to have existed, chloroform did, and was also considered as a possible means of execution. As *Garner* notes, however, chloroform was discarded as a



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consideration along with lethal injection: The suggestion that the death penalty be inflicted by means of the injection of prussic acid or the use of chloroform is open to the objection that the hypodermic syringe and the use of chloroform are associated with the practice of medicine, and their employment for the purpose of putting criminals to death would arouse the unanimous protest of the medical profession. *Id.*

FN468. 99 U.S. 130 (1879).

FN469. *In re Kemmler*, 136 U.S. 436, 447 (1890).

FN470. For further analysis of all cases referred to in the categories below, see generally *Denno*, *supra* note 377.

FN471. See *id.*

FN472. See, e.g., *McCleskey v. Kemp*, 481 U.S. 279, 299 (1987); *Johnson v. Glick*, 481 F.2d 1028, 1031 (2d Cir.), cert. denied, 414 U.S. 1033 (1973); *Bailey v. Lally*, 481 F.Supp. 203, 218 (D.Md.1979); *Thompson v. State*, 542 So.2d 1286, 1298 (Ala.Crim.App.), *aff'd*, 542 So.2d 1300 (Ala.1988), cert. denied, 493 U.S. 874 (1989).

FN473. See, e.g., *Rummel v. Estelle*, 445 U.S. 263, 288 (1980) (Powell, J., dissenting); *Furman v. Georgia*, 408 U.S. 238, 323 (1971) (Marshall, J., concurring); *id.* at 378 (Burger, J., dissenting); *Louisiana ex rel. Francis v. Resweber*, 329 U.S. 459, 474 (1946); *United States v. Rosenberg*, 195 F.2d 583, 607 n. 31 (2d Cir.), cert. denied, 344 U.S. 838 (1952); *United States ex rel. Hoss v. Cuyler*, 452 F.Supp. 256, 281 (E.D.Pa.1978); *State v. Burdette*, 63 S.E.2d 69, 85 (W.Va.1950).

FN474. These issues ranged, for example, from sentencing, inadequate medical treatment of prisoners, disciplinary measures, and prison conditions, to prisoners' wrong size shoes, as assessed under the Federal Constitution and/or various state constitutions. For cases determining whether various prison sentences are "cruel and unusual," see *Rummel*, 445 U.S. at 288 (Powell, J. dissenting) (upholding a life sentence for three felony convictions); *Carmona v. Ward*, 576 F.2d 405, 410, 427 (2d Cir.1978) (upholding maximum life terms imposed on convictions of class A drug felonies), cert. denied, 439 U.S. 1091 (1979); *Rosenberg*, 195 F.2d at 607 n. 31 (upholding a death sentence for espionage); *Kenimer v. State ex rel. Webb*, 59 S.E.2d 296, 310 (Ga.Ct.App.1950) (upholding a \$200 fine and 20 days imprisonment for contempt); *Phipps v. State*, 385 A.2d 90, 95 (Md.Ct.Spec.App.1978) (upholding a life sentence for rape); *State v. Walker*, 235 N.W.2d 810, 814 (Minn.1975) (upholding a life sentence for murder), cert. denied, 426 U.S. 950 (1976); *State v. Higgins*, 592 S.W.2d 151, 155 (Mo.1979) (upholding a life sentence for murder); *People v. Broadie*, 332 N.E.2d 338, 347 (N.Y.) (upholding life sentences for class A drug felonies), cert. denied, 423 U.S. 950 (1975); *McDougle v. Maxwell*, 203 N.E.2d 334, 337 (Ohio 1964) (upholding a sentence of one to twenty years for auto theft); *State v. Vaccaro*, 403 A.2d 649, 652 (R.I.1979) (upholding a life sentence for murder); *R.R. v. State*, 448 S.W.2d, 187, 189 (Tex.Civ.App.1969) (upholding confinement of a minor until majority for delinquency). The determination of whether inadequate medical treatment of prisoners constitutes "cruel and unusual" punishment also has been a popular topic of litigation in federal courts. See, e.g., *Estelle v. Gamble*, 429 U.S. 97, 102 (1976); *Wood v. Housewright*, 900 F.2d 1332, 1339-40 (9th Cir.1990); *Monmouth County Corr. Inst. Inmates v. Lanzaro*, 834 F.2d 326, 348 (3d Cir.1987), cert. denied, 486 U.S. 1006 (1988); *Williams v. Treen*, 671 F.2d 892, 901 (5th Cir.1982), cert. denied, 459 U.S. 1126 (1983); *Cunningham v. Jones*, 567 F.2d 653, 658 (6th Cir.1977); *Brock v. Warren County*, 713 F.Supp. 238, 242 (E.D.Tenn.1989); *Feliciano v. Colon*, 697 F.Supp. 37, 45 (D.P.R.1988); *Dawson v. Kendrick*, 527 F.Supp. 1252, 1306 (S.D.W.Va.1981); *Jones v. Houser*, 489 F.Supp. 795, 796 (E.D.Mo.1980); *Parrilla v. Cuyler*, 447 F.Supp. 363, 365 (E.D.Pa.1978).

FN475. See *Denno*, *supra* note 377.

FN476. See, e.g., *McCleskey*, 481 U.S. at 299; *Woodson v. North Carolina*, 428 U.S. 280, 308 (1976) (Rehnquist, J., dissenting); *Roberts v. Louisiana*, 428 U.S. 325, 351 (1976) (White, J., dissenting); *Gregg v. Georgia*, 428 U.S. 153, 168 (1976) (plurality opinion of Stewart, Powell, and Stevens, J.J.); *Furman*, 408 U.S. at 241 (Douglas, J., concurring); *Ralph v. Warden, Maryland Penitentiary*, 438 F.2d 786, 789 (4th Cir.1970), cert. denied, 408 U.S. 942

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(1972); *State v. Dickerson*, 298 A.2d 761, 767 (Del.1972); *State v. Waddell*, 194 S.E.2d 19, 22-23 (N.C.1973).

FN477. See, e.g., *Roberts*, 428 U.S. at 351 (White, J., dissenting); *Woodson*, 428 U.S. at 308 (Rehnquist, J., dissenting); *Spinkellink v. Wainwright*, 578 F.2d 582, 616 (5th Cir.1978), cert. denied, 440 U.S. 976 (1979); *Segura v. Patterson*, 402 F.2d 249, 255 (10th Cir.1968), rev'd, 403 U.S. 946 (1971); *United States ex rel. Melton v. Hendrick*, 218 F.Supp. 293, 296 (E.D.Pa.1963), aff'd, 330 F.2d 263 (3d Cir.1964); *State v. Curry*, 270 So.2d 484, 485 (La.1972); *State v. Garcia*, 664 P.2d 969, 979 (N.M.), cert. denied, 462 U.S. 1112 (1983). *State v. Crook*, 221 So.2d 473, 476 (La.1969), and *State v. Shaw*, 255 S.E.2d 799, 805 (S.C.), cert. denied, 444 U.S. 957 (1979), have cited both *Kemmler* and *Francis* to support the proposition that electrocution does not constitute cruel and unusual punishment.

FN478. For example, in *Gray v. Lucas*, 463 U.S. 1237 (1983), Justice Marshall quoted a doctor's detailed description of the effects of lethal gas for support in his argument that execution by lethal gas constituted "cruel and unusual" punishment. See *id.* at 1241-42 (Marshall, J., dissenting). In *Mitchell v. Hopper*, 538 F.Supp. 77 (S.D.Ga.1982) the petitioner offered to produce evidence showing that electrocution is unnecessarily torturous and painful, especially when compared to available alternatives such as lethal injection. However, the court refused to look at the additional evidence offered by petitioner because the issue previously was examined and rejected by the court in *Spinkellink*, 578 F.2d at 616. See *Mitchell*, 538 F.Supp. at 94. In *People v. Stewart*, 528 N.E.2d 631 (Ill.1988), cert. denied, 489 U.S. 1072 (1989), the court rejected a claim that lethal injection is "cruel and unusual" punishment because it lacked medical and scientific support. *Id.* at 639. Furthermore, the court in *Ex parte Granviel*, 561 S.W.2d 503 (Tex.Crim.App.1978), rejected the petitioner's argument that death by lethal injection is unconstitutional because no persuasive proof that lethal injection is inherently cruel and inhumane was offered. See *id.* at 510. By contrast, the evidence presented by the defendant in *State v. Frampton*, 627 P.2d 922, 934-36 (Wash.1981), was lengthy, detailed, and well supported by scientific and medical research. Based on this evidence, the court held that hanging involves a slow and lingering death and that it is therefore an unconstitutional method of execution. See *id.* at 936.

FN479. *Kemmler* used a Fourteenth Amendment analysis to reach its conclusion that *Kemmler* was not abridged of any privileges or immunities, or denied due process of law. In *re Kemmler*, 136 U.S. 436, 448-49 (1890). Consequently, *Kemmler* is frequently cited in cases analyzing the scope of the Fourteenth Amendment, and whether the Eighth Amendment is applicable to the states. For example, numerous cases cite *Kemmler* for the proposition that the Eighth Amendment only applies to the federal government and not to the states. See, e.g., *Furman*, 408 U.S. at 422 n. 4 (Powell, J., dissenting); *Malloy v. Hogan*, 378 U.S. 1, 4 n. 2 (1964); *Poe v. Ullman*, 367 U.S. 497, 541 (1961); *Bartkus v. Illinois*, 359 U.S. 121, 124 (1959); *State v. Fletcher*, 240 N.E.2d 905, 909 (Ohio Ct.C.P.1968), aff'd, 259 N.E.2d (Ohio Ct.App.1970), rev'd, 271 N.E.2d 567 (Ohio 1971), cert. denied, 404 U.S. 1024 (1972). Furthermore, *Kemmler* is cited in cases analyzing the Privileges and Immunities Clause of the Fourteenth Amendment. See, e.g., *Shapiro v. Thompson*, 394 U.S. 618, 667 (1969); *New York v. O'Neil*, 359 U.S. 1, 13 (1959) (Douglas, J., dissenting); *Consumers Union of United States, Inc. v. Albright*, 427 F.Supp. 840, 845 (S.D.N.Y.1977), vacated sub nom. *Consumers Union of United States Inc. v. Heimann*, 438 U.S. 901 (1978); *Application of People of State of New York*, 100 So.2d 149, 155 (Fla.1958), rev'd sub nom. *New York v. O'Neill*, 359 U.S. 1 (1959). Some cases cite *Kemmler* in discussions of the extent of the Fourteenth Amendment. See, e.g., *United States ex rel. Palmer v. Ragen*, 159 F.2d 356, 357 (7th Cir.), cert. denied, 331 U.S. 823 (1947); *United States v. Krause*, 92 F.Supp. 756, 759 n. 1 (W.D.La.1950); *First Nat'l Benefit Soc'y v. Garrison*, 58 F.Supp. 972, 981 (S.D.Cal.1945), aff'd, 155 F.2d 522 (9th Cir.1946); *State v. Stevenson*, 127 S.E.2d 638, 660 (W.Va.1962), cert. denied, 372 U.S. 938 (1963).

FN480. For example, both *Trop v. Dulles*, 356 U.S. 86, 99 (1958), and *Furman v. Georgia*, 408 U.S. 238, 264-66 (1972) (Brennan, J., concurring), cited *Kemmler* for the proposition that the exact scope of the phrase "cruel and unusual" has not been detailed by the Court. See also *Jackson v. Hendrick*, 503 A.2d 400, 405 (Pa.1986) (claiming that only three words impose a constitutional limitation on punishments and they are "cruel and unusual"); In *re Candido*, 31 Haw. 982, 990 (1931) (noting that the extent or exactness of "cruel and unusual" has never been articulated).

FN481. For example, *Furman* states that "Kemmler stands primarily for the proposition that a punishment is not

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necessarily unconstitutional simply because it is unusual, so long as the legislature has a humane purpose in selecting it." *Furman*, 408 U.S. at 323 (Marshall, J., concurring); see also *Ughbanks v. Armstrong*, 208 U.S. 481, 487 (1908); *Bolln v. Nebraska*, 176 U.S. 83, 86 (1900). Furthermore, *Carmona v. Ward*, 576 F.2d 405 (2d Cir.1978), cert. denied, 439 U.S. 1071 (1979), cites *Kemmler* to conclude that the "deference we owe to the decisions of the state legislatures under our federal system, is enhanced where the specification of punishments is concerned, for these are peculiarly questions of legislative policy." *Id.* at 410 (citations omitted); see also *United States v. Rosenberg*, 195 F.2d 583, 607 n. 31 (2d Cir.), cert. denied, 344 U.S. 838 (1952); *Phipps v. State*, 385 A.2d 90, 95 (Md.Ct.Spec.App.1978); *State v. Hogan*, 58 N.E. 572, 575 (Ohio 1900); *Commonwealth v. Moody*, 382 A.2d 442, 445 n. 12 (Pa.1977) (*Nix*, J., dissenting), cert. denied, 438 U.S. 914 (1978); *Cepeda v. Lugo*, 50 P.R.R. 364, 370 (1936).

FN482. 111 S.Ct. 2680 (1991).

FN483. See *id.* at 2691-92; see also *People v. Velez*, 388 N.Y.S.2d 519, 531 (Sup.Ct.1976) (citing *Kemmler* to emphasize the court's powers, conferred by the state constitution, to declare void legislative acts prescribing punishments for crimes that are in fact cruel and unusual).

FN484. The following states have death penalty statutes: Alabama, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Kentucky, Louisiana, Maryland, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, Washington, and Wyoming. The District of Columbia and the following 14 states have no death penalty statute: Alaska, Hawaii, Iowa, Kansas, Maine, Massachusetts, Michigan, Minnesota, New York, North Dakota, Rhode Island, Vermont, West Virginia, and Wisconsin. See NAACP LEGAL DEF. & EDUC. FUND, DEATH ROW U.S.A. REP. 135 (Jan. 21, 1991).

FN485. See, e.g., 21 U.S.C. § 848(e) (1988) (authorizing the imposition of the death penalty when the defendant is convicted of an intentional killing that takes place in connection with specified drug offenses). Twenty-five other federal statutes allow for the death penalty for specified crimes, ranging from "Congressional, Cabinet, and Supreme Court assassination," 18 U.S.C. § 351(b)(2) (1988), to "[g]athering or delivering defense information to aid foreign government," *id.* § 794(a).

FN486. Articles 1-140 of the Uniform Code of Military Justice ("UCMJ") allow imposition of the death penalty for 11 purely military crimes and two traditional common law crimes. 10 U.S.C. §§ 885-910, 918, 920a (1988). The Manual for Courts-Martial, United States provides procedures for implementing the death penalty. See 2 FRANCIS A. GILLIGAN & FREDRIC I. LEDERER, COURT-MARTIAL PROCEDURE § 23-32.10 (1991). See generally Maj. Gregory F. Intoccia, USAF, Constitutionality of the Death Penalty Under the Uniform Code of Military Justice, 32 A.F.L.REV. 395, 395-413 (1990) (arguing that the UCMJ's application of the death penalty is unconstitutional); Maj. Kevin K. Spradling, USAF, & Capt. Michael D. Murphy, USAF, Capital Punishment, the Constitution, and the Uniform Code of Military Justice, 32 A.F.L.REV. 415, 415-30 (1990) (arguing that the military's application of the death penalty meets constitutional requirements).

FN487. See generally James R. Acker & C.S. Lanier, Doing the Devil's Work: Toward Model Death Penalty Legislation, 27 CRIM.L.BULL. 219 (1993) (analyzing the strengths and weaknesses of federal and state death penalty statutes).

FN488. See *infra* part VI and accompanying text.

FN489. At the time Congress enacted 21 U.S.C. § 848(e), for example, it neglected to specify the method for implementing a federal death sentence, and no other statute specifies such a method. See *United States v. Chandler*, 996 F.2d 1073, 1095 (11th Cir.1993). The absence of any specified method for federal executions is an oversight due to Congress' haste to pass death penalty legislation in 1988. See Jan Hoffman, As State After State Resumes Executions, U.S. Death-Penalty Law Is Still in Limbo, N.Y. TIMES, July 10, 1992, at A19. Prior to its repeal in

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1984, 18 U.S.C. § 3566 (1982), repealed by Comprehensive Crime Control Act of 1984, Pub.L. No. 98-473, 98 Stat. 1987, allowed for the execution of federal prisoners through state law. Section 3566 provided that "[t]he manner of inflicting the punishment of death shall be that prescribed by the laws of the place within which the sentence is imposed ... [or] the court shall designate some other place in which such sentence shall be executed in the manner prescribed by the laws thereof." 18 U.S.C. § 3566 (1982). Now pending in Congress, the Capital Punishment Procedures Act of 1993 would provide specific federal procedures for implementing the death penalty. See H.R.382, 103d Cong., 1st Sess. (1993).

FN490. See 2 GILLIGAN & LEDERER, *supra* note 486, § 23-32.10.

FN491. See WILLIAMS J. BOWERS ET AL., LEGAL HOMICIDE 395-531 (1984). Compared with other countries, the United States is unique in terms of its multiplicity of sanctioned methods. Internationally, hanging and shooting are the predominant means of execution. Of the 109 countries examined in one survey, hanging was used by 54, firing squads by 35, beheading by eight, and electrocution by one (the Philippines). See AMNESTY INT'L USA, WHEN THE STATE KILLS ... 95-239 (1989). Every Western industrial country apart from the United States has stopped executing prisoners. FRANKLIN E. ZIMRING & GORDON HAWKINS, CAPITAL PUNISHMENT AND THE AMERICAN AGENDA 3 (1987).

FN492. See ALA.CODE § 15-18-82 (1982); CONN.GEN.STAT. § 54-100 (1990); FLA.STAT. ch. 922.10 (1991); GA.CODE ANN. § 17-10-38 (1990); IND.CODE § 35-38-6-1 (1992); KY.REV.STAT.ANN. § 431.220 (Michie/Bobbs-Merrill Supp.1990); NEB.REV.STAT. § 29-2543 (1989); OHIO REV.CODE ANN. § 2949.22 (Baldwin 1992); S.C.CODE ANN. § 24-3-530 (Law.Co-op.1989); TENN.CODE ANN. § 40-23-114 (1990); VA.CODE ANN. § 53.1-234 (Michie 1991).

FN493. ALA.CODE § 15-18-82(a) (1982).

FN494. See Susan Lehman, A Matter of Engineering: Capital Punishment As a Technical Problem, ATLANTIC MONTHLY, Feb. 1990, at 26.

FN495. See TROMBLEY, *supra* note 1, at 3-94; James Bandler, Fred Leuchter: Killing Time with Death's Efficiency Expert, IN THESE TIMES, June 20-July 3, 1990, at 22. Leuchter's partner, Norbie Lynch, had no past engineering or science expertise. See TROMBLEY, *supra* note 1, at 24. Before working with Leuchter, Lynch lost a job selling car insurance because of concerns about the financing of insurance policies he had obtained for two girlfriends. See *id.* Thereafter, Lynch worked with a Boston commodities outfit that the Commodities Futures Trading Commission raided and closed down in 1983. The Commission withdrew Lynch's license and prohibited him from ever selling commodities. At this time, Lynch became Leuchter's partner. *Id.* In 1987, Lynch ceased working with Leuchter when Leuchter discovered a substantial sum of money missing from the business. *Id.* at 25.

FN496. Leuchter provided execution equipment or components, engaged in consulting about executions, or had future plans to engage in execution consulting in the states listed below. See National Coalition to Abolish the Death Penalty, Fred Leuchter: Execution Equipment Contracts (1992) (list compiled by the National Coalition, on file with the William and Mary Law Review). Unless otherwise indicated by citations following the mentioning of a state, no other information about the dates, amount, or nature of the consulting contracts has been compiled. The National Coalition based its information upon two sources: Fast and Flawless Executions, They're His Business, WASH. TIMES, July 2, 1990 (Insight), at 1, and Evidentiary Hearing Transcript, *Buenoano v. Dugger*, No. 90-473-CIV-ORL-19, 1990 WL 119637 (M.D.Fla. June 21, 1990). This author updated the National Coalition's account with the sources indicated below. More recent accounts of Leuchter's consulting, however, indicate that they have either diminished considerably or are nonexistent. (1) Alabama (electrocution only). The State of Alabama cancelled Leuchter's 1990 contract for a new electric chair in July 1990. See Fast and Flawless, *supra*. In August 1990, the Alabama Attorney General's office distributed a memorandum to other states raising questions about Leuchter's expertise and reliability. See Michael D. Hinds, Making Execution Humane (or Can It Be?), N.Y. TIMES, Oct. 14, 1990, at 8. (2) Arizona (gas chamber and lethal injection). In December 1991, the State of Arizona withdrew a formal request for proposals from engineering



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firms to evaluate its gas chamber after a deputy warden received information regarding Leuchter's anti-Holocaust conclusions in *The Leuchter Report*. FRED A. LEUCHTER, *THE LEUCHTER REPORT: THE END OF A MYTH: AN ENGINEERING REPORT ON THE ALLEGED EXECUTION GAS CHAMBERS OF AUSCHWITZ, BIRKENAU AND MAJDANEK, POLAND* (1988) [hereinafter *LEUCHTER REPORT*]. See Chris Limberis, *State Scrambling to Get Gas Chamber Tested*, *ARIZ. DAILY STAR*, Dec. 15, 1991, at 5B. Because Leuchter was expected to bid on the job, the original selection process for bidders was eliminated. See *id.* Instead, the State decided to obtain less formal bids from others via telephone. See *id.* at 1B. The spokesperson for the Department of Corrections explained that initially he was not aware "of the baggage ... carried by Leuchter." *Id.* at 5B. (3) California (gas chamber and lethal injection). Leuchter refurbished an old gas chamber. Bandler, *supra* note 495, at 22. He also consulted on the gas chamber. See *LEUCHTER REPORT*, *supra*, at 7. (4) Colorado (lethal injection only). As of July 1990, Leuchter had a contract for a lethal injection machine. See *Fast and Flawless*, *supra*. (5) Delaware\* (hanging or lethal injection). Leuchter installed a lethal injection machine and also fitted Delaware's gallows rope with a sleeve that prevents rope burn. See *Fast and Flawless*, *supra*. (6) Florida (electrocution only). Leuchter consulted in May 1990. (7) Georgia (electrocution only). Leuchter consulted. (8) Illinois\* (lethal injection only). Leuchter installed a lethal injection computer. In August 1990, a prominent Illinois physician, Dr. Edward A. Brunner, Chairman of the Anesthesia Department at Northwestern University Medical School, provided an affidavit in federal court stating that Leuchter's lethal injection system would render inmates incapable of screaming and cause them severe pain before they died. See *Hinds*, *supra*, at 8. On August 17, 1990, the Illinois Department of Corrections ended Leuchter's contract for "execution support." *Id.* On August 20, 1990, Leuchter sent a letter to Illinois officials stating that because he was no longer maintaining their execution equipment he would assume no responsibility if it failed, commenting also that the machine "has an intermittent functional problem and may very likely fail during the execution." *Id.* (9) Indiana (electrocution only). Leuchter worked to maintain the chair and provided a new helmet. The chair uses Leuchter-designed components. See *Fast and Flawless*, *supra*. (10) Kentucky (electrocution only). (11) Mississippi (lethal injection or gas chamber). (12) Missouri\* (lethal injection or gas chamber). Leuchter installed a lethal injection machine and consulted. See *LEUCHTER REPORT*, *supra*, at 7. According to Gail Hughes, deputy director of the Missouri Department of Corrections, "Leuchter was the only person to bid for the contract to make the machine, so we gave it to him." *Hinds*, *supra*, at 8. (13) Montana (lethal injection or hanging). (14) Nebraska (electrocution only). (15) Nevada (lethal injection only). (16) New Jersey\* (lethal injection only). Leuchter built a lethal injection machine. (17) New Mexico (lethal injection only). (18) North Carolina (lethal injection or gas chamber). Leuchter consulted. See *LEUCHTER REPORT*, *supra*, at 7. (19) Ohio (electrocution only). (20) Oregon (lethal injection only). As of July 1990, Leuchter had a contract for a lethal injection machine. See *Fast and Flawless*, *supra*. (21) South Carolina (electrocution only). Leuchter "works closely" in order to maintain the electric chair. Several years ago he also provided a new helmet. The State uses a Leuchter-designed electric chair or components. See *Fast and Flawless*, *supra*. (22) Tennessee (electrocution only). Leuchter installed a new electric chair. The State uses a Leuchter-designed chair or components. *Fast and Flawless*, *supra*. (23) Texas (lethal injection only). (24) Utah (lethal injection or firing squad). (25) Virginia (electrocution). According to Leuchter, Virginia's Department of Corrections contacted him in 1984 or 1985, requesting a price for replacing the helmet and electrodes used on its electric chair. The state attorney general has stated that Leuchter was disgruntled because he didn't get the contract, thereby explaining why Leuchter provided expert testimony against the State's electric chair in the appeal of Richard Boggs. See *Expert Questions Bloody Execution*, *MARTINVILLE BULL.*, Oct. 19, 1990, at A2. (26) Washington (lethal injection or hanging). (27) Wyoming (lethal injection only). As of July 1990, Leuchter had a contract for a lethal injection machine. See *Fast and Flawless*, *supra*. \*\*\* United States Army (lethal injection only). Leuchter consulted on lethal injection. \* States that use Leuchter's computerized lethal injection machines costing \$35,000. See *Fast and Flawless*, *supra*. The following death penalty states have no evidence of Leuchter contracts: Arkansas, Idaho, Louisiana, Maryland, New Hampshire, Oklahoma, Pennsylvania, and South Dakota.

FN497. Telephone Interview with Fred A. Leuchter (July 17, 1992).

FN498. See *Hinds*, *supra* note 496, at 8 (referring to a May 1990, broadcast of the ABC News Program, Prime Time Live). See also *infra* note 716 and accompanying text. The label "Dr. Death" has been applied to others. The label was perhaps first used with respect to Dr. James Grigson, the Dallas psychiatrist who testified in over 100 cases concerning the level of dangerousness of defendants on trial. See Thomas H. Cook, *The Best Games Are Insoluble*, N.Y.

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TIMES, Mar. 3, 1991, at 10 (reviewing Ron Rosenbaum's book, *Travels with Dr. Death: And Other Unusual Investigations*); Tony Mauro & Scott Harrison, *Texas Group to Challenge State's Use of Execution*, USA TODAY, Apr. 9, 1991, at 6A. The label has been most recently applied to Jack Kevorkian, the pathologist famous for his assisted suicides of terminally ill patients. See *Rx for Death*, TIME, May 31, 1993, at 34, cover.

FN499. See *infra* notes 692-748 and accompanying text.

FN500. For example, Leuchter's testimony and affidavits have been used in a number of cases to determine whether design defects or disrepair of electric chairs have resulted in pain and suffering. See, e.g., *Squires v. Dugger*, 794 F.Supp. 1568, 1579-80 (M.D.Fla.1992); *Buenoano v. Dugger*, No. 90-473-CIV-ORL-19, 1990 WL 119637, at \*32 (M.D.Fla. June 22, 1990); *Kirkpatrick v. Whitley*, No. 91-0502, 1991 U.S. Dist. LEXIS 7387, at \*49 (E.D.La. May 29, 1991).

FN501. A brief overview of the basics of electrical physics provides some foundation for a discussion of electrocution. Most commonly, electricity is measured in volts, amperes, and ohms, which are interrelated as follows by Ohm's law:  $\text{amperes} = \text{volts/ohms}$   $\text{volts} = \text{amperes} \times \text{ohms}$   $\text{ohms} = \text{volts/amperes}$ . Voltage measures the extent of electromotive force in the system. Amperage measures current flow per unit time. An ohm measures the resistance to the conduction of electricity. One unit of current flow (amperes) accompanies one unit of electromotive force (volts) divided by one unit of resistance (ohms). The amount of amperes is the most significant factor in the electrocution of a human being. Although the resistance of human skin usually protects an individual from electrocution, a successful electrocution occurs when there is a source of electrons under sufficient force to overcome the body's resistance and a low-resistance pathway to the grounds. See R.K. Wright, M.D. & J.H. Davis, M.D., *The Investigation of Electrical Deaths: A Report of 220 Fatalities*, 25 J. FORENSIC SCI. 514, 516-17 (1980).

FN502. See Hoffman, *supra* note 388, at 1055.

FN503. See FREDERICK DRIMMER, *UNTIL YOU ARE DEAD: THE BOOK OF EXECUTIONS IN AMERICA* 25 (1990).

FN504. Hoffman, *supra* note 388, at 1055.

FN505. From 1890 to 1963, New York executed 695 prisoners in the State's electric chair. Henry Schwarzschild, *Executed by the State of New York*, N.Y. TIMES, Jan. 16, 1983, at 18E (Letter to the Editor). From 1890 to 1916, 55 individuals, including William Kemmler, were executed at Auburn Prison and 26 individuals were executed at Clinton State Prison. *Id.* After 1916, the remaining individuals were executed at Sing Sing Prison which was then designated the only state institution where capital punishment would be implemented. The electric chair, which has remained virtually unchanged since 1916, was moved from Sing Sing prison in 1971 to the Green Haven Correctional Facility in Stormville, New York. See Billy House, *Gannett News Service*, May 25, 1989, available in LEXIS, Nexis Library, Wires File. An earlier chair was used for the earlier executions. See *id.* After 1963, New York's death penalty provisions were struck down piece by piece until the last provision, concerning murderers who were already serving life sentences, was finally eliminated in 1984. See Adam Z. Horvath, *A Gallery from After the Gallows*, NEWSDAY, June 19, 1989, at 5.

FN506. DRIMMER, *supra* note 503, at 25.

FN507. *Id.*

FN508. *Id.* For the 1981 execution of Stephen T. Judy, who was convicted of murdering a mother and her three children, the executioner applied a 10-second charge of 2,300 volts, then a 20-second charge of 500 volts. *Id.* According to one earlier account of electrocutions at Sing Sing, the first jolt is applied when the prisoner is exhaling and has relatively less air in the lungs. Squire, *supra* note 316, at 5. This approach is taken because "when the current is applied the glottis contracts and prevents the air from escaping from the lungs and on breaking contact the chest

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collapses and the air leaving the lungs makes an unpleasant noise." Id.

FN509. DRIMMER, *supra* note 503, at 26.

FN510. Id.

FN511. Id.

FN512. See id.

FN513. LOUIS NIZER, *THE IMPLOSION CONSPIRACY* 57 (1973).

FN514. Lehman, *supra* note 494, at 26.

FN515. Id.

FN516. Id. at 27.

FN517. Id. Leuchter arrived at this volts/amperes ratio based on a number of considerations. According to Leuchter, 2,000 volts "is usually sufficient to seize the heart." Id. An additional 400 volts, however, might be necessary to extinguish physically large inmates. Id. Another 240 volts compensate for the 10% drop in voltage that is likely to take place during the electrocution. Id. These additions both prevent the need to re-electrocute or impose "unnecessary trauma to the subject prior to death." Id.

FN518. Id.

FN519. Id.

FN520. Id.

FN521. Id.; see also Canan, *supra* note 55, at 67 (noting that the electrodes that are attached to "the shaved human head and leg reach temperatures over 1,900 degrees Fahrenheit and can melt copper").

FN522. See Lehman, *supra* note 494, at 27.

FN523. Id.

FN524. See id. at 28.

FN525. See id.

FN526. See Fast and Flawless, *supra* note 496, at 1.

FN527. Lehman, *supra* note 494, at 28.

FN528. Id.

FN529. Id.

FN530. See id.

FN531. Id.



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FN532. See FRED A. LEUCHTER ASSOCS., INC., MODULAR ELECTROCUTION SYSTEM MANUAL 1 (Nov. 27, 1989) [hereinafter ELECTROCUTION MANUAL].

FN533. Lehman, *supra* note 494, at 28.

FN534. *Id.*

FN535. *Id.*

FN536. See Fell, *supra* note 146, at 440.

FN537. See *id.* ("That [my report] was influential in the passage of the electro-execution bill goes without saying.").

FN538. *Id.*

FN539. *Id.*

FN540. *Id.*

FN541. See Theodore Bernstein, Effects of Electricity and Lightning on Man and Animals, 18 J. FORENSIC SCI. 3, 5-6 (1973). Fibrillation has been defined as "[e]xceedingly rapid contractions or twitching of muscular fibrils [minute fibers]" that commonly occur in ventricles (or chambers) of the heart. STEDMAN'S MEDICAL DICTIONARY 580 (25th ed. 1990). When a person experiences ventricular fibrillation, blood circulation stops, unconsciousness can occur in less than 10 seconds, and irreversible brain damage can take place in four to six minutes unless such symptoms are corrected, such as through cardiopulmonary resuscitation. See Bernstein, *supra*, at 5-6.

FN542. See Theodore Bernstein, Theories of the Causes of Death from Electricity in the Late Nineteenth Century, 9 MED. INSTRUMENTATION 267, 270-73 (1975); see also Memorandum in Support of Bill of Complaint for Declaratory Relief, and Temporary and Permanent Injunctive Relief at 9 n. 5, Bassette v. Virginia, No. 3:92CV11 (E.D.Va. Jan. 23, 1992) [hereinafter Bassette Memorandum].

FN543. See Bernstein, *supra* note 542, at 270-73.

FN544. See STEDMAN'S MEDICAL DICTIONARY, *supra* note 541, at 404. The detection of defibrillation or "counter shock" derived directly from the study of electrocution. See M.J. Hampshire, Ph.D., Electrocution, Inaugural Lecture at the University of Salford, England 5 (Mar. 22, 1979) (transcript on file with the William and Mary Law Review). The greater the magnitude of shocks that was administered, the less likely these shocks resulted in ventricular fibrillation. See *id.* This result occurs because a greater degree of shock increases the probability that the heart muscle will be totally arrested, with normal heart action usually being restored upon release of the shock current. See *id.*

FN545. Fell, *supra* note 146, at 437.

FN546. See *infra* notes 575-91 and accompanying text.

FN547. See HUGHES, AMERICAN GENESIS, *supra* note 88, at 64-67. Tesla's research on alternating current led to the creation and operation of the electric chair, which he called "the barbarous machine which inflicts the most excruciating torture known to man." HARRY E. BARNES, THE STORY OF PUNISHMENT: A RECORD OF MAN'S INHUMANITY TO MAN 243-44 (2d ed. 1972) (quoting a statement by Nicola Tesla).

FN548. See TEETERS & HEDBLUM, *supra* note 64, at 447 (quoting a statement by Nicola Tesla).

FN549. *Id.*

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FN550. ROYAL COMM'N ON CAPITAL PUNISHMENT, 1949-53 REPORT 251 (1953) [hereinafter ROYAL COMMISSION REPORT]. In 1949, the Queen of England appointed 12 individuals to consider and report whether liability under the criminal law in Great Britain to suffer capital punishment for murder should be limited or modified, and if so, to what extent and by what means, for how long and under what conditions persons who would otherwise have been liable to suffer capital punishment should be detained, and what changes in the existing law and the prison system would be required; and to inquire into and take account of the position in those countries whose experience and practice may throw light on these questions. *Id.* at iii. To this day, the Royal Commission's report is cited as solid authority on methods of execution. See, e.g., THE DEATH PENALTY IN AMERICA (Hugo A. Bedau ed., 3d ed. 1982); FRANKLIN E. ZIMRING & GORDON HAWKINS, CAPITAL PUNISHMENT AND THE AMERICAN AGENDA (1986).

FN551. ROYAL COMMISSION REPORT, *supra* note 550, at 251.

FN552. See *id.*

FN553. See *id.* According to the Royal Commission's account [t]he execution takes place at 10 a.m. At midnight on the preceding night the condemned man is taken from the condemned cell block to a cell adjoining the electrocution chamber. About 5:30 a.m. the top of his head and the calf of one leg are shaved to afford direct contact with the electrodes. (The prisoner is usually handcuffed during this operation to prevent him from seizing the razor.) At 7:15 a.m. the death warrant is read to him and about 10 o'clock he is taken to the electrocution chamber. Five witnesses are present (including representatives of the Press) and two doctors--the prison medical officer and the city coroner. The witnesses watch the execution through a grille or dark glass and cannot be seen by the prisoner. Three officers strap the condemned man to the chair, tying him around the waist, legs and wrists. A mask is placed over his face and the electrodes are attached to his head and legs. As soon as this operation is completed (about two minutes after he has left the cell) the signal is given and the switch is pulled by the electrician; the current is left on for two minutes, during which there is alternation of two or more different voltages. When it is switched off, the body slumps forward in the chair. The prisoner does not make any sound when the current is turned on, and unconsciousness is apparently instantaneous. He is not, however, pronounced dead for some minutes after the current is disconnected. The leg is sometimes slightly burned, but the body is not otherwise marked or mutilated. *Id.* (footnote omitted).

FN554. *Id.*

FN555. See *infra* notes 556-91. See generally Hugo Bedau, Introduction to CAPITAL PUNISHMENT 7, 22-23 (James A. McCafferty ed., 1972) (quoting the Royal Commission as stating that they could not recommend that hanging should be replaced by electrocution nor lethal injection).

FN556. See, e.g., Poyner Reprieve, *supra* note 302, at 11-12.

FN557. See Affidavit of Dr. Harold Hillman ¶ 10, Exhibit Z of Bassette Memorandum, *supra* note 542 [hereinafter Hillman Affidavit]; Exhibit 10 of Poyner Stay, *supra* note 33; Affidavit of E.B. Igren, M.D. ¶ 15, Exhibit 12 of Poyner Stay, *supra* note 33 [hereinafter Igren Affidavit]; Exhibit 5 of Poyner Reprieve, *supra* note 302, ¶¶ 8-14 (reviewing autopsy reports for 14 men electrocuted in Virginia's electric chair); Affidavit of Donald D. Price, Ph.D. ¶¶ 4-10; Exhibit 13 of Poyner Stay, *supra* note 33 [hereinafter Price Affidavit]; Exhibit 8 of Poyner Reprieve, *supra* note 302. The most extensive pictorial and autopsy evidence of burns is provided in the briefs for Anthony Bertolotti. See Appendix to Petition for Writ of Habeas Corpus by Person in State Custody, Bertolotti v. Dugger, No. 90-559-CIV-ORL-18 (M.D.Fla. July 23, 1990) (providing post-mortem pictures of numerous death row inmates who have been executed).

FN558. Dr. Hillman holds a Ph.D. in biochemistry and the equivalent of an M.D. in medicine and surgery. Hillman Affidavit, *supra* note 557, ¶ 1. The Unity Laboratory was created to conduct research on human and animal brains. See *id.* ¶ 2.

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FN559. See id. ¶ 11.

FN560. Id.; see also Harold Hillman, An Unnatural Way to Die, NEW SCIENTIST, Oct. 27, 1983, at 276, 278 ("In fact, there is no reason whatsoever to believe that the condemned person does not suffer severe and prolonged pain.").

FN561. CHARLES DUFF, A HANDBOOK ON HANGING 118 (1974).

FN562. Id. (quoting Rota from the DAILY MAIL, Jan. 14, 1928).

FN563. Id. at 118-19 (quoting Rota from the DAILY MAIL, Jan. 14, 1928).

FN564. Canan, supra note 55, at 68.

FN565. Dr. James Le Fanu, Health Second Opinion: A Shocking Way to Be Killed, THE INDEPENDENT, Aug. 12, 1990, at 51.

FN566. See id.

FN567. See id.

FN568. ELECTROCUTION MANUAL, supra note 532.

FN569. Id. at 1.

FN570. Id.

FN571. See Bassette Memorandum, supra note 542, at 2.

FN572. See id. at 12.

FN573. See supra notes 531-32 and accompanying text.

FN574. See Bassette Memorandum, supra note 542, at 12.

FN575. See id.

FN576. See Hillman Affidavit, supra note 557, ¶ 9. According to Hillman, [t]he resistance between the electrodes and the brain is very high compared with the resistance of the skin wetted by perspiration containing water and salts. It can be shown by comparison of the electrical activity recorded on the surface of the scalp that only 1/20th to 1/10th of the voltage generated in the brain can penetrate to the scalp. Therefore, a similar proportion of the voltage applied to the outside of the scalp from an electrode during electrocution will penetrate the brain. The remainder will pass across the skin to the other electrode. This scientific understanding is borne out by the autopsies of men executed by electrocution. The external burns to the head are extensive; however, examination of the internal organs reveals that the brain is far less effected [sic] than the skin by the application of current during electrocution. The burns appearing inside the scalp are minute compared with those on the skin's surface. In fact, autopsies of the brain after execution by electrocution, reveals that the brain is incapacitated through [a] relatively slow process of heating up by the passage of electricity through the body. In short, the brain literally cooks until death occurs. Id.

FN577. See id.

FN578. See id. ¶ 12.

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FN579. Id. ¶¶ 12-13.

FN580. See id. ¶ 13.

FN581. See id.; see also infra notes 749-840 and accompanying text.

FN582. Telephone Interview with Fred Leuchter (July 28, 1992).

FN583. Affidavit of Orrin Devinsky, M.D. ¶¶ 3-4, Exhibit 1 of Bassette Memorandum, supra note 542 [hereinafter Devinsky Affidavit].

FN584. Id. ¶ 11. According to Devinsky, although the voltage and the amperage of a lightning strike can be 20,000 to 100,000 times stronger than an intentional electrocution, about one-third of lightning victims survive. Id. ¶ 14. Survivors have evidenced serious psychological and psychiatric reactions, and have also described severe lingering pain and emotional distress. Id. Although electrical injuries that occur during industrial and other accidents may apply currents of over 30,000 volts compared to Virginia's electric chair, which may apply between 240 to 1,725 volts, survivors often remain conscious during the accident. Id. ¶ 15. Conscious subjects report feeling pain and discomfort during the shock. Id. Moreover, there are cases where even unconscious victims are still able to describe the pain they felt during the accident. Id. Individuals who experience electroconvulsive shock report a number of traumatic feelings, including pain and discomfort. Id. ¶ 16. Electroconvulsive shock is a part of electroconvulsive therapy that uses currents of 150 volts, an amount which is slightly less than the 240 volts applied by Virginia's method of electrocution after the first 10-second jolt of 1,725 volts. Id. Devinsky also emphasizes that the perception of time during an electrical trauma frequently becomes so distorted that an individual perceives the time during extreme pain as lasting considerably longer than it actually does. Id. ¶ 17.

FN585. Id. ¶ 18.

FN586. See id. ¶¶ 13-22. For medical research on the physical effects of accidental and therapeutic electrocution, see MAX FINK, M.D., CONVULSIVE THERAPY: THEORY AND PRACTICE 51-57 (1979); MICHAEL B. SABOM, M.D., F.A.C.C., RECOLLECTIONS OF DEATH: A MEDICAL INVESTIGATION 15-16 (1982); MacDonald Critchley, M.D., Neurological Effects of Lightning and Electricity, 226 LANCET 68 (1934); Electrical Injuries, 229 LANCET 1002 (1935) (report of a lecture by MacDonald Critchley before the Medical Society of London); Leston A. Havens, M.D., A Comparative Study of Modified and Unmodified Electric Shock Treatment, 19 DISEASES NERVOUS SYS. 29, 32-34 (1959); C.W. Hume, Electric Shock and Subjective Sensation, 229 LANCET 1021 (1935); Fredrich Panse, Electrical Trauma, in 23 HANDBOOK OF CLINICAL NEUROLOGY: INJURIES OF THE BRAIN AND SKULL, PART I 683 (P.J. Vinken & G.W. Bruyn eds., 1975); A.H.D. Richmond, A Fatal Case of Electrocution, 228 LANCET 16 (1935).

FN587. See Devinsky Affidavit, supra note 583, ¶ 18.

FN588. Id.

FN589. See id. ¶ 21.

FN590. See id. This variation was also documented by Amos O. Squire, the Chief Physician at Sing Sing Prison during the 1920's. He witnessed the electrocutions of 114 men and performed autopsies on each afterwards. See Squire, supra note 316, at 2. According to Squire, [t]he resistance of a given person varies largely from time to time, in accordance with their blood and skin condition, as well as the percentage of moisture and perspiration emanated through the epidermis, which means, if taken technically, that a man whose body is thoroughly dry, may stand a considerable higher voltage than he could otherwise withstand on a hot summer day, when wet with perspiration, which forms an excellent conductor, due to its contents of salt matter. For this reason, a person may be electrocuted from a certain electrical circuit while the next one to come in contact with it would only be slightly hurt, showing conclusively that the

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voltage is only one of three important functions when studying the danger of any electrical current. *Id.* at 3 (emphasis added).

FN591. Devinsky Affidavit, *supra* note 583, ¶ 21.

FN592. See Wikberg, *supra* note 375, at 36.

FN593. See *id.*

FN594. See George Howe Colt, The Most Rehabilitated Prisoner in America, *LIFE*, Mar. 1993, at 68, 70 (describing the life of Wilbert Rideau, the editor-in-chief and "guiding genius" of *The Angolite*). See generally WILBERT RIDEAU & RON WIKBERG, *LIFE SENTENCES* (1992) (describing prison life in Angola).

FN595. This issue about the electric chair helped to persuade state officials to switch to lethal injection. See Colt, *supra* note 594, at 72.

FN596. See Wikberg, *supra* note 375, at 36-37.

FN597. *Id.* at 36.

FN598. *Id.* at 37 (quoting an affidavit prepared for Kirkpatrick v. Whitley, No. 91-0502, 1991 U.S. Dist. LEXIS 7387, at \*49 (E.D.La. May 29, 1991), vacated and remanded, 992 F.2d 491 (5th Cir.1993)).

FN599. See Wikberg, *supra* note 375, at 40.

FN600. See *id.*

FN601. *Id.*

FN602. *Id.*

FN603. *Id.*

FN604. See *id.* at 40-41. Bernstein's interest in the history of electrocution began with his studies on the effects of electricity and lightning on humans. *Id.* at 40. Bernstein holds B.S., M.S., and Ph.D. degrees from the University of Wisconsin. *Id.* at 40-41. He also worked with Boeing in Seattle, with the AC Electronics Division of General Motors Corporation in Milwaukee, and with TRW Systems in Redondo Beach, California. *Id.* at 41. He recently retired from the faculty of the University of Wisconsin, where his major interests were in electrical and lightning safety. *Id.* He has been qualified as an expert in electrical engineering and lightning in over 15 state and federal courts. *Id.*

FN605. *Id.*

FN606. *Id.*

FN607. *Id.* (quoting an affidavit filed as part of the pleadings of Kirkpatrick v. Whitley, No. 91-0502, 1991 U.S. Dist. LEXIS 7387 (E.D.La. May 29, 1991), vacated and remanded, 992 F.2d 491 (5th Cir.1993)).

FN608. *Id.*

FN609. *In re Kemmler*, 136 U.S. 436 (1890).

FN610. *Id.* at 446.

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FN611. *Glass v. Louisiana*, 471 U.S. 1080, 1094 (1985) (Brennan, J., dissenting from denial of certiorari).

FN612. See *supra* part II.

FN613. See *supra* notes 343-54 and accompanying text.

FN614. 329 U.S. 459 (1947) (plurality opinion).

FN615. *Id.* at 462.

FN616. See Petition for Rehearing at 2-3, *Louisiana ex rel. Francis v. Resweber*, 329 U.S. 459 (1947).

FN617. *Id.* at 2.

FN618. *Id.* at 3-4.

FN619. No. 3:92CVII (E.D.Va. Jan. 23, 1992).

FN620. See Arthur Hodges, *Bassette Escapes His Date with Death*, RICH. TIMES-DISPATCH, Jan. 24, 1992, at A1.

FN621. See Bassette Memorandum, *supra* note 542, at 2.

FN622. *Id.* at 2 n. 1.

FN623. See *id.* at 2.

FN624. *Id.* at 40.

FN625. *Id.*

FN626. See *id.* at 17-27 (detailing accounts of various executions).

FN627. See *id.* at 31.

FN628. See *id.* at 31-32.

FN629. The State did release information relating to its training of personnel participating in executions. See *id.* at 34.

FN630. See *id.* at 32 n. 10; see also *infra* notes 768-70 and accompanying text (referring to the execution of John Evans in Alabama). Bassette's attorneys emphasized that an examination of the engineering designs of Louisiana's electric chair in 1990 demonstrated numerous defects. See Bassette Memorandum, *supra* note 542, at 34. These defects in turn could be traced to the bodily mutilations exhibited by Louisiana's executed defendants in photographs. See *id.* at 32 n. 10.

FN631. Bassette Memorandum, *supra* note 542, at 34.

FN632. See *id.* at 34-35. Bassette argued that [n]o training manuals were provided by the Commonwealth concerning even rudimentary aspects of electrical engineering or design. No training manuals were provided concerning what to do in the event of a malfunction. No training manuals were provided concerning skin resistance, placement of electrodes, density of salinity, or any fundamental details of the process, purpose, nature, or effect of electrocution.... Such gross lack of training might not be so horrific if the Commonwealth required qualified electrical engineers or other personnel with an understanding of electrical circuitry, electricity, physics, or other specialties enabling them to



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comprehend the significance of their duties and the ability to competently undertake those duties and react in the even [sic] of an emergency. The Commonwealth has no such requirement. Indeed, the sole qualification for participation in an execution is that the individual must be a "corrections officer" who "volunteers for the duty." *Id.* at 35.

FN633. See *id.* at 36-37.

FN634. See *id.* at 40-41.

FN635. See *id.*

FN636. *Id.* at 27.

FN637. *Id.*

FN638. See *infra* notes 763-67 and accompanying text.

FN639. See *infra* notes 807-08 and accompanying text.

FN640. DeNeen L. Brown, Execution Probe Sought, WASH. POST, Oct. 21, 1990, at B1.

FN641. See Bassette Memorandum, *supra* note 542, at 28.

FN642. *Id.*

FN643. See *id.* at 29. These factors include the placement of electrodes, the insulation of the skull, skin conductivity, the amount and length of the electrical current, and the varying sizes, weights, and moisture levels found among prisoners. See *supra* note 590 and accompanying text.

FN644. See *infra* notes 825-36 and accompanying text.

FN645. See *infra* note 829 and accompanying text.

FN646. See Bassette Memorandum, *supra* note 542, at 26-27 (quoting from an internal Virginia Department of Corrections memorandum dated Dec. 12, 1986).

FN647. See VA. GENERAL ASSEMBLY, 1992 FINAL CUMULATIVE INDEX OF BILLS, JOINT RESOLUTIONS, RESOLUTIONS, AND DOCUMENTS (June 15, 1992).

FN648. See *id.*

FN649. This subheading is taken from Colin Hughes, This Electric Chair Works Fine, If You Are a Colander, THE INDEPENDENT, July 26, 1990, at 11.

FN650. See *supra* notes 1-9 and accompanying text.

FN651. See TROMBLEY, *supra* note 1, at 53.

FN652. See *infra* notes 673-91 and accompanying text.

FN653. See *infra* notes 657-69 and accompanying text.

FN654. See Sean Loughlin, Miswiring Requires Second Electrocution, GAINESVILLE SUN (Fla.), July 15, 1989, at



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1A; see also *infra* notes 787-99 and accompanying text.

FN655. Loughlin, *supra* note 654, at 8A.

FN656. *Id.*

FN657. See Weyrich, *supra* note 7, at A1.

FN658. See *Buenoano v. Dugger*, No. 90-473-CIV-ORL-19, 1990 WL 119637, at \* 32 (M.D.Fla. June 22, 1990).

FN659. See TROMBLEY, *supra* note 1, at 52.

FN660. See *id.*

FN661. See *id.*; see also *Buenoano*, No. 90-473-CIV-ORL-19, at \*32.

FN662. TROMBLEY, *supra* note 1, at 52.

FN663. See *Buenoano*, No. 90-473-CIV-ORL-19, at \*32.

FN664. *Id.*

FN665. *Id.*

FN666. See *Faulty Electrocution Takes 3 Jolts to Kill Slayer of 2 Lawmen; His Breathing Lasts 4 Minutes*, MIAMI HERALD, May 5, 1990, at A12. A sponge is placed on the prisoner's shaved head under a headset consisting of leather and metal that is bolted into place so that the prisoner's head cannot move. When wet, the sponge creates conductivity for the 2,000 volts and 14 amps of current that are applied to the prisoner's skull. See *id.*

FN667. See TROMBLEY, *supra* note 1, at 48.

FN668. See *id.*

FN669. Hughes, *supra* note 649, at 11.

FN670. See *Ellen McGarrahan, Kitchen Aids Come in Handy on Death Row*, MIAMI HERALD, July 29, 1990, at 6B.

FN671. *Id.*

FN672. *Id.*

FN673. See *id.*

FN674. See *Execution Should End Dispute, Martinez Says*, HOUSTON POST, July 29, 1990, at A10.

FN675. See *id.*

FN676. *Electric Chair in Working Order, Engineer Says*, SUN SENTINEL (Ft. Lauderdale, Fla.), July 24, 1990, at 7A.

FN677. *Steve Weller, Old Sparky Passes Test; Courts Should Allow Florida to Execute Colanders*, SUN SENTINEL

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(Ft. Lauderdale, Fla.), July 26, 1990, at 16A.

FN678. Electric Chair in Working Order, *supra* note 676, at 7A.

FN679. *Id.*

FN680. *Id.*

FN681. *See id.*

FN682. *Id.*

FN683. *See id.*

FN684. *Id.*

FN685. *See* Execution Should End Dispute, *supra* note 674, at A10.

FN686. *See, e.g.,* Hughes, *supra* note 649, at 11.

FN687. Weller, *supra* note 677, at 16A.

FN688. *See* Florida Uses Chair for Execution, WASH. POST, July 29, 1990, at A17.

FN689. *See* Florida Executes Killer; Electric Chair Works Properly, SUN SENTINEL (Ft. Lauderdale, Fla.), July 28, 1990, at 19A.

FN690. Florida Uses Chair for Execution, *supra* note 688, at A17.

FN691. *See* Squires v. Dugger, 794 F.Supp. 1568 (M.D.Fla.1992); Hamblan v. Dugger, 748 F.Supp. 1498 (M.D.Fla.), cert. denied, 497 U.S. 1031 (1990); Buenoano v. Dugger, No. 90-473-CIV-ORL-19, 1990 WL 119637 (M.D.Fla. June 22, 1990), vacated and remanded on different grounds, 963 F.2d 1433 (11th Cir.1992).

FN692. Telephone Interview with Fred A. Leuchter (July 17, 1992).

FN693. *See* Lehman, *supra* note 494, at 29.

FN694. *See id.* While being interviewed for a news story in the Atlantic Monthly, Leuchter handed the reporter an embossed pen providing his name, phone number, and business address, in case she would ever need "Execution Equipment and Support." *See id.*

FN695. Capital Punishment: Cruel and Usual, ECONOMIST, Jan. 23, 1993, at 86 (reviewing TROMBLEY, *supra* note 1).

FN696. TROMBLEY, *supra* note 1, at 26.

FN697. *See* Lehman, *supra* note 494, at 28.

FN698. *See id.*

FN699. *Id.*

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FN700. *Id.* This estimate may vary. The lethal injection used in the Texas execution of Elliot Rod Johnson reportedly cost the state \$71.50. Douglas Freeland, Johnson Executed for 1982 Murder at Beaumont State, HOUSTON POST, June 24, 1987, at 3A.

FN701. Lehman, *supra* note 494, at 28.

FN702. *Id.*

FN703. *Id.*

FN704. *Id.* at 28-29.

FN705. For example, Tafero's executioner, who was anonymous, was paid \$150 in cash for turning on the automated electrocution cycle. Larry Keller, Witness to Tafero Execution Has One Overriding Thought: The Horror of It All, SUN SENTINEL (Ft. Lauderdale, Fla.), May 10, 1990, at 23A. The two execution technicians required to force liquids into the tube for lethal injection in New Jersey would be paid about \$500 each for their services. Death Perfumed, L.A. DAILY J., Sept. 1, 1983, at 4.

FN706. TROMBLEY, *supra* note 1, at vii.

FN707. See Chris Limberis, State Scrambling to Get Gas Chamber Tested, ARIZ. DAILY STAR, Dec. 15, 1991, at 1B.

FN708. See An "Expert" on Executions Is Charged with Fraud, N.Y. TIMES, Oct. 24, 1990, at A14.

FN709. LEUCHTER REPORT, *supra* note 496. The Leuchter Report concludes as follows: "It is, therefore, the best engineering opinion of the author that none of the facilities examined were ever utilized for the execution of human beings and that the crematories could never have supported the alleged work load attributed to them." *Id.* at 4.

FN710. See *id.* at 3; R. v. Zundel, 37 O.A.C. 354, 357 (1990) (Can.). The "spreading false news" statute provided that "[e]very one who wilfully publishes a statement, tale or news that he knows is false and that causes or is likely to cause injury or mischief to a public interest is guilty of an indictable offence and liable to imprisonment for a term not exceeding two years." Criminal Code, R.S.C., ch. C-46, § 181 (1985) (Can.).

FN711. See Zundel, 37 O.A.C. at 357.

FN712. *Id.* at 357-59; Bandler, *supra* note 495, at 22. Zundel had been tried previously on the same charge in 1985. Zundel, 37 O.A.C. at 357. The seven and a half week trial ended with a conviction and a sentence of 15 months imprisonment that was overturned in 1987 by the Ontario Court of Appeal because of errors of law. Zundel, 18 O.A.C. 161, 167, 215 (1987) (Can.). The retrial, which began in January 1988, ended in 1990 when Zundel received a sentence of nine months in prison. See Zundel, 37 O.A.C. at 357. However, on appeal the Canadian Supreme Court held, in a four-three decision, that § 181 was unconstitutional. See R. v. Zundel, 95 D.R.L.4th 202, 278-79 (Can.1992).

FN713. See Bandler, *supra* note 495, at 22-23.

FN714. See *id.*

FN715. See Fred A. Leuchter, Jr., SPECIAL EDITION: A PERIODIC UPDATE (Civil Rights Div., Anti-Defamation League of B'nai B'rith), Jan. 1991, at 1.

FN716. Hinds, *supra* note 496, at 1. The Village Voice criticized the Prime Time Live program, noting that ABC had

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failed to mention that Leuchter had no engineering degree. Prime Time Live: Dead on Arrival, VILLAGE VOICE, May 22, 1990, at 8, 8. The Voice also made known that The Leuchter Report had been published by Aryan Nation, a white supremacist group, and by the Institute for Historical Research, the American arm of a French group lead by historian Robert Faurisson. See *id.* The Voice claimed that Leuchter was the "executioner's best friend" and "a star of the anti-Semitic far right's crusade against what they call 'the Holocaust hoax.'" *Id.*

FN717. See Hinds, *supra* note 496, at 1.

FN718. *Id.*

FN719. See *id.*

FN720. *Id.*

FN721. See David Armstrong, Controversial Inventor Places Ad Aiming to Sell Execution Device, BOSTON HERALD, Aug. 15, 1991, at 9.

FN722. See Hinds, *supra* note 496, at 1.

FN723. Affidavit of Dr. Edward A. Brunner ¶ 8H, Exhibit C of Complaint, Silagy v. Thompson, No. 90-C-5028, 1991 WL 18418 (N.D.Ill. Feb. 7, 1991) [hereinafter Brunner Affidavit].

FN724. See Dr. Death and His Wonderful Machine, N.Y. TIMES, Oct. 18, 1990, at A24.

FN725. Hinds, *supra* note 496, at 1.

FN726. *Id.*

FN727. *Id.*

FN728. See Kimberly B. Baker, Author of Disputed Report on Nazi Camps Is Deported; Malden Man Expelled by British Officials, BOSTON GLOBE, Nov. 18, 1991, at 17. Leuchter was charged in East Cambridge District Court. See Paul Langner, Malden Man Signs Agreement in Court on Licensing Charge; Is Figure in Holocaust Controversy, BOSTON GLOBE, June 12, 1991, at 32. An engineering degree from an accredited school is required to obtain a license from the State. See Electric Chair Builder Lacked Proper Degree, WASH. POST, June 13, 1991, at B5.

FN729. See Baker, *supra* note 728, at 17.

FN730. Christopher B. Daly, Holocaust Revisionist Admits He Is Not Engineer, WASH. POST, June 18, 1991, at A6; Langner, *supra* note 728, at 32; see also Letter from J. Harry Parker, P.E. & P.S., Chairman, Board of Registration of Professional Engineers and Land Surveyors, Boston, Massachusetts, to Michael Friedland, Assistant District Attorney, Office of the District Attorney for Middlesex County, Massachusetts (Mar. 14, 1991) (explaining that the Board's review of materials allegedly prepared by Fred A. Leuchter constituted the practice of engineering under Massachusetts statute MASS.GEN.L. ch. 112, § 81D-81T) (copy on file with the William and Mary Law Review); Letter of Certification from Marie E. DeVeau, Clerk of the Board of Registration of Professional Engineers and Land Surveyors and appointed Keeper of the Boards of Registration within the Division of Registration, Commonwealth of Massachusetts (June 10, 1991) (certifying that there was no record that Fred A. Leuchter, Jr., had ever been licensed as a professional engineer by the Board from 1942 to the present) (copy on file with the William and Mary Law Review).

FN731. Consent Agreement at 1, Commonwealth v. Leuchter, No. EN 90-102 (Mass.Dist.Ct. signed June 11, 1991).

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FN732. Id.

FN733. Id. at 2. The consent agreement was signed by Leuchter and J. Harry Parker, the chairman of the Massachusetts Board of Registration of Professional Engineers and Land Surveyors. See id. Under its terms, Leuchter agreed to stop "using in any manner whatsoever the title 'engineer' " and to stop "[i]ssuing or distributing any reports where I hold myself out as an engineer or alternatively, provide engineering opinions, specifically but not limited to 'An Engineering Report on the Alleged Execution Gas Chambers at Auschwitz, Birkenau, and Majdanek' [The Leuchter Report]." Id. Leuchter also agreed, among other things, that while he was unregistered as a professional engineer, he: a. represented [himself] as an engineer able to consult in areas of engineering concerning execution technology; moreover, [he] formed a corporation which one of the purposes was to consult in all areas of engineering; .... c. represented [himself] as Chief Engineer in letters and proposals [he] sent to correctional institutions in other states, including, but not limited to, New Jersey and Alabama; d. represented [himself] as Chief Engineer and ... rendered engineering opinions in letters and affidavits which [he] ... submitted for filing in state and federal courts outside of Massachusetts.... Id. at 1. However, Leuchter also issued a one-page notice stating that " '[t]here is no finding nor has there been any admission of guilt on the part of Leuchter.' " Daly, supra note 730, at A6.

FN734. See Electric Chair Builder, supra note 728, at B5.

FN735. Id.

FN736. Id.

FN737. Also at issue is the validity of Leuchter's disclaimer under contract law and its effect on a party not at privity under tort law. Interview with Joseph Perillo, Alpin J. Cameron Chair of Law, Fordham University School of Law (July 27, 1992). Leuchter's disclaimer reads as follows: "Fred A. Leuchter Associates, Inc. assumes no liability for the intended or actual use of this device." ELECTROCUTION MANUAL, supra note 532, at 7.

FN738. See Hinds, supra note 496, at 1.

FN739. Id.

FN740. See supra note 729 and accompanying text.

FN741. For example, Leuchter's attorney, Kirk D. Lyons, has a long history of representing white supremacist groups and Ku Klux Klan members. See Hugh Aynesworth, Air Force Discharges Another for KKK Ties, WASH. TIMES, Feb. 22, 1990, at A3; Valerie Elliott, Clarke Urged to Ban Ku Klux Lawyers, SUNDAY TELEGRAPH, June 28, 1992, at 2. In 1988, Lyons won the acquittal of former Texas Ku Klux Klan Grand Dragon Louis Beam on sedition charges. See Langner, supra note 728, at 32. He has also represented other white supremacists. See id. Moreover, one account describes Leuchter as having achieved "center stage in the so-called Holocaust revisionist movement, an international group that calls the Holocaust a hoax perpetrated by Jews to garner support for Israel." Jordana Hart, Protest Greets Doubter, BOSTON GLOBE, Dec. 12, 1990, at 42 [hereinafter Hart, Protest Greets Doubter]; see also Jordana Hart, Innocent Plea on Credentials Charge; Accused Is Focus of Dispute on Nazis, BOSTON GLOBE, Oct. 24, 1990, at 30 [hereinafter Hart, Innocent Plea]; Jordana Hart, Nazi Hunter to Oppose Malden Holocaust Revisionist, BOSTON GLOBE, Dec. 11, 1990, at 11. On November 16, 1991, Leuchter was deported from Britain while attending a seminar organized by David Irving, a historian well known for his defense of Hitler and exposition on what he considers to be "the Holocaust myth." See Gitta Sereny, David Irving Resells Hitler's War; His Words Provoke Seighs in Germany. His Books Are in Shop in London, THE INDEPENDENT, Nov. 27, 1991, at 21. British officials stated that Leuchter's "presence would not be conducive to the public good." Id. at 17. Since that time Leuchter has been barred from Britain by an exclusion order. See id. Leuchter denies that he is a revisionist, however, contending that he wrote The Leuchter Report only because he was an expert in Zundel's trial. See Hart, Protest Greets Doubter, supra. He notes that James Roth, an executive at Alpha Analytical, Inc., a testing laboratory in Westborough, Massachusetts, also testified on behalf of Zundel based upon Roth's chemical analysis of brick samples

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that Leuchter acquired from his tours of German gas chambers. See Alex Beam, History on Trial, BOSTON GLOBE, Aug. 3, 1990, at 53. According to Roth's data and analysis that are presented in The Leuchter Report, the samples evidenced "little or no trace of toxic gases." Id. In a newspaper interview, Roth qualified this finding. See id. "Roth says he stands behind the soil analysis his laboratory performed, but adds he does not agree with Leuchter's stated conclusion that the Holocaust is a '50-year-old lie.'" Id. In an interview with this author, Roth put his findings and statements in perspective. Telephone Interview with James Roth, Laboratory Manager for Alpha Analytical, Inc. (July 29, 1992). According to Roth, there was "no question in [his mind] that the analysis was biased." Id. Although he "very definitely question[ed]" Leuchter's analysis of the data, he simply did not know whether Leuchter's analytical errors were intentional. For this reason, Roth explained that he did not attempt to correct whatever misimpression Leuchter may have been conveying in his testimony at the Zundel trial. Moreover, even though "lots of factors" could have affected Roth's analyses of the brick samples that Leuchter provided him, the prosecutor in Zundel never attempted to uncover what these may have been. Id. For example, the prosecutor never asked how the bricks were analyzed and what the samples were, even though to Roth, "the whole sampling protocol was questionable." Id. As Roth explained, cyanide is surface material on a brick; it does not penetrate. Because the entire brick was analyzed for cyanide (and not just the surface) it could have been the case that the brick was heavily covered with cyanide and yet just traces would show in testing. Id. As Roth stated, "[i]t's a miracle" he saw any cyanide whatsoever. Furthermore, iron cyanide (the type that would be on bricks) turns blue and does not disappear over time. Id. Roth stated that the bricks he analyzed were blue, confirming his assumption that they indeed had been exposed to cyanide, but that an analysis of the whole brick would not be able to detect this. Id. Because of this and other testimony, Leuchter's knowledge and credentials remain under attack. His methods, once regarded as the most humane for execution, are "now suspected of inflicting a little too much pain, even for fans of capital punishment." Dr. Death, supra note 724, at A24. Moreover, Leuchter blames Jewish activists for bad publicity which has "scared away correctional officials nationwide," claiming that these activists "have interfered with [his] ... right to make a living." Hart, Innocent Plea, supra, at 30. For financial reasons, he placed an advertisement in Boston's Want Advertiser in order to sell his \$10,000 lethal injection execution machine, which previously was to be sold to the State of Delaware. See Armstrong, supra note 721. The advertisement appeared as follows: "EXECUTION DEVICE: Control module for lethal injection machine. Being sold for non-payment. \$10,000. (Malden)." Id. The advertisement caused considerable controversy since the Want Advertiser is a "family" magazine and a lethal injection machine was an atypical item. Id.

FN742. Dr. Death, supra note 724, at A24.

FN743. Hinds, supra note 496, at 1.

FN744. Id.

FN745. See id.

FN746. No. 90-473-CIV-ORL-19, 1990 WL 119637, at \*32 (M.D.Fla. June 22, 1990).

FN747. See id.

FN748. Id. at 35.

FN749. 428 U.S. 153 (1976).

FN750. Fernandez, supra note 20, at A14. Radelet's estimate was based on his scrutiny of the 168 media-witnessed executions prior to the April 1992 execution of Robert Alton Harris. Of those 168 executions, 15, or 8.9%, were botched. Id. Of the 15 that were botched, seven were by electrocution, seven by lethal injection, and one by gas chamber. Id. Another source stated that at least nine of the 129 executions that had occurred since 1976 to the time the source's estimate was made, were botched. See Weyrich, supra note 7, at A1. In total, 197 persons have been executed in the United States between 1976 and March 26, 1993. Texas Executes a Mexican Killer, Raising a Furor Across the Border, N.Y. TIMES, Mar. 26, 1993, at A15.



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FN751. See supra part V; Telephone Interview with Michael Radelet, Professor of Sociology, University of Florida (Sept. 2, 1993).

FN752. Bassette Memorandum, supra note 542, at 3.

FN753. See supra notes 634 and accompanying text.

FN754. See infra notes 860-61 and accompanying text. According to M.J. Hampshire, Professor of Solid State Electronics at the University of Salford in Great Britain, descriptions of victims who survived the electric chair's shocks were "very predictable" given the state of ignorance about electrocution during the earlier part of the century. Hampshire, supra note 544, at 6. For example, contrary to earlier beliefs, death by electrocution is not enhanced by increasing degrees of administered shocks. See *id.* Indeed, episodes of "counter shock" demonstrate that the reverse circumstance may occur. See *id.* at 5.

FN755. See Bassette Memorandum, supra note 542, at 15, 17-18. "[E]xecutions are carried out in private; there are few witnesses; pictures are not allowed; and newspaper accounts are, because of 'family newspaper' requirements of taste, sparing in detail." WASHINGTON RESEARCH PROJECT, THE CASE AGAINST CAPITAL PUNISHMENT 38 (1971), reprinted in Capital Punishment: Hearings on H.R.8414, H.R.8438, H.R.9486, H.R.3243, H.R.193, H.R.11797, and H.R.12217 Before Subcomm. No. 3 of the House Comm. on the Judiciary, 92d Cong., 2d Sess. 308 (1972).

FN756. See Bassette Memorandum, supra note 542, at 18.

FN757. An Electric Chair Is Turned On, NEWSWEEK, June 4, 1979, at 26; Execute List, UPI, Feb. 20, 1985, available in LEXIS, Nexis Library, UPI File (listing executions occurring after the Supreme Court lifted its ban). Gary Gilmore, the first person to be executed after the ban, died by firing squad on January 17, 1977. An Electric Chair Is Turned On, supra, at 26; Execute List, supra.

FN758. Bill Curry, Convicted Murderer Executed by Florida; Three Surges of Electricity, Convicted Killer Is Executed, WASH. POST, May 26, 1979, at A1.

FN759. *Id.*

FN760. Execution, Reuters, May 26, 1979, available in LEXIS, Nexis Library, Reuter File.

FN761. Curry, supra note 758, at A1.

FN762. An Electric Chair Is Turned On, supra note 757, at 26.

FN763. See Bassette Memorandum, supra note 542, at 19-20.

FN764. See *id.* at 28.

FN765. See Affidavit of J. Samuel Glasscock, Esq. ¶ 4, Exhibit 3 of Bassette Memorandum, supra note 542. Glasscock is currently an attorney in Virginia and in 1982 was a representative to the General Assembly of Virginia. *Id.*

FN766. *Id.* ¶ 5.

FN767. *Id.* ¶¶ 5-8.

FN768. For a description of Evans' execution, see Mark C. Winne, What It's Like to See a Man Die in the Chair,



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ATLANTA J. & CONST., May 1, 1983, at 17D.

FN769. Canan, *supra* note 55, at 78-80; see also Garry Mitchell, Killer Executed in Electric Chair in Alabama, BOSTON GLOBE, Apr. 23, 1983, at 3.

FN770. If We Must, Execute by Injection, ATLANTA CONST., Apr. 27, 1983, at 10A; see also Mitchell, *supra* note 769.

FN771. Murderer Electrocuted in Georgia After Appeals Fail, N.Y. TIMES, Dec. 13, 1984, at A18.

FN772. See *id.*

FN773. *Id.*

FN774. *Id.*

FN775. Weyrich, *supra* note 7, at A1.

FN776. Murderer Electrocuted, *supra* note 771, at A18.

FN777. Weyrich, *supra* note 7, at A1.

FN778. See Man Who Murdered His Father-in-Law Executed in Indiana, N.Y. TIMES, Oct. 17, 1985, at A22.

FN779. *Id.*

FN780. Brian Fuller, Vandiver Execution Scrutinized, UPI, Nov. 2, 1985, available in LEXIS, Nexis Library, Wires File.

FN781. Electric Chair Takes 17 Minutes to Kill Vandiver, FLA. TIMES-UNION, Oct. 17, 1985, at A10.

FN782. See Killer's Execution Takes 17 Minutes in Indiana Chair, WASH. POST, Oct. 17, 1985, at A16.

FN783. Man Who Murdered, *supra* note 778, at A22.

FN784. See Andrew Fegelman, Indiana Execution Wasn't "As Planned", CHI. TRIB., Oct. 17, 1985, at C9.

FN785. Electric Chair Takes 17 Minutes, *supra* note 781, at A10.

FN786. *Id.*

FN787. Hinds, *supra* note 496, at 1.

FN788. Fernandez, *supra* note 20, at A14.

FN789. Peter Applebome, 2 Electric Jolts in Alabama Execution, N.Y. TIMES, July 15, 1989, at 6.

FN790. John Archibald, On Second Try, Dunkins Executed for Murder, BIRMINGHAM NEWS, July 14, 1989, at 8A.

FN791. Applebome, *supra* note 789, at 6.

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FN792. See supra note 604 and accompanying text.

FN793. See Wikberg, supra note 375, at 41-42.

FN794. Id. at 42.

FN795. See Michelle Garland, Execution System Reworked, MONTGOMERY ADVERTISER, July 15, 1989, at 1A.

FN796. Id. at 2A.

FN797. Id.

FN798. Id. at 1A.

FN799. Archibald, supra note 790, at 8A. For a description of Evans' execution, see supra notes 768-70 and accompanying text.

FN800. Barnett, supra note 3, at 1A, 9A. For a description of Tafero's execution and the events surrounding it, see supra notes 639-80 and accompanying text.

FN801. Barnett, supra note 3, at 1A.

FN802. Id. at 1A, 9A; Barnett, supra note 2, at 1A.

FN803. See supra note 2 and accompanying text.

FN804. See supra notes 649-91 and accompanying text.

FN805. Virginia Executes Man for Murder, N.Y. TIMES, July 21, 1990, at 9.

FN806. See Bassette Memorandum, supra note 542, at 23.

FN807. Mike Allen, Groups Seek Probe of Electrocution's Unusual Events, RICH. TIMES-DISPATCH, Oct. 19, 1990, at B1.

FN808. Brown, supra note 640, at B1.

FN809. Id.

FN810. Tim Cox, Evans Executed for Cop Slaying, UPI, Oct. 18, 1990, available in LEXIS, Nexis Library, Wires File.

FN811. Id.

FN812. See id.

FN813. See Jim Clardy, Electrocuted Evans' Nosebleed Has Activist Questioning Voltage, WASH. TIMES, Oct. 19, 1990, at B4.

FN814. See Allen, supra note 807, at B1; Brown, supra note 640, at B8.

FN815. Letter from Marie Deans, Executive Director, Virginia Coalition on Jails and Prisons, to Edward W. Murray,

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Director, Virginia Department of Corrections 2 (Oct. 19, 1990) (concerning the possible malfunction of the electric chair used in the Evans execution).

FN816. Cox, *supra* note 810.

FN817. See Jim Mason, No Need for Probe, Va. Official Contends, RICH. NEWS LEADER, Oct. 20, 1990, at 11.

FN818. *Id.*

FN819. Allen, *supra* note 807, at B1.

FN820. G.L. Marshall, Expert Questions Circumstances of Evans' Execution, UPI, Oct. 18, 1990, available in LEXIS, Nexis Library, Wires File.

FN821. See *id.*

FN822. See *id.*

FN823. See *id.*

FN824. See *supra* notes 805-06 and accompanying text.

FN825. Karen Haywood, Two Jolts Needed to Complete Execution, FREE LANCE-STAR (Fredericksburg, Va.), Aug. 23, 1991, at 17.

FN826. Mike Allen, Death Diary Pleas, Anger Fill Days Before Execution, RICH. TIMES-DISPATCH, Aug. 25, 1991, at B1.

FN827. *Id.*

FN828. See *id.*

FN829. Nelson Schwartz & Mike Allen, Death Penalty Opponents Angry About Latest Execution, RICH. TIMES-DISPATCH, Aug. 24, 1991, at B1.

FN830. See *id.* Bassette considered this recommendation, in response to Peterson's death, to be evidence of foreseeable negligence. See *supra* note 623 and accompanying text.

FN831. Schwartz & Allen, *supra* note 829, at 1.

FN832. *Id.*

FN833. *Id.*

FN834. See Virginia Alters Its Procedure for Executions in Electric Chair, WASH. POST, Aug. 24, 1991, at B3.

FN835. *Id.*

FN836. See *supra* note 634 and accompanying text.

FN837. Today (NBC television broadcast, May 21, 1992).

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FN838. Id.

FN839. See id.

FN840. Id.

FN841. In a number of cases, courts have considered evidence relating to the constitutionality of a particular electric chair and of specific electrocution procedures followed by various states, rather than electrocution as an execution method. See, e.g., *Thomas v. Jones*, 742 F.Supp. 598, 607 (S.D.Ala.1990); *Ritter v. Smith*, 568 F.Supp. 1499, 1526 (S.D.Ala.1983), aff'd in relevant part, rev'd in part on other grounds, 726 F.2d 1505, 1519 (11th Cir.), cert. denied, 469 U.S. 869, 869-70 (1984); *Buenoano v. Dugger*, No. 90-473-CIV-ORL-19, 1990 WL 119637, at \*31-\*35 (M.D.Fla. June 22, 1990), vacated and remanded on different grounds, 963 F.2d 1433 (11th Cir.1992).

FN842. See *Buenoano*, 1990 WL 119637, at \*33 (stating that the issue was not the method of electrocution but "whether the means selected by the State ... is malfunctioning so that the execution of Petitioner will be effected with unnecessary pain").

FN843. See *Colt*, supra note 594, at 72.

FN844. See supra note 647 and accompanying text.

FN845. See supra notes 689-91 and accompanying text.

FN846. Telephone Interview with the Honorable Mike Hazlewood, Member of the House of Delegates, Commonwealth of Virginia (July 8, 1992).

FN847. See *Poyner v. Murray*, 113 S.Ct. 1573 (1993) (denying appellant's application for stay of execution pending appeal).

FN848. The Court made this refusal in part because Poyner did not challenge the chair's constitutionality at his original trial. See Tim Cox, High Court Refuses Stay; Killer Issues Last Words, UPI, Mar. 18, 1993, available in LEXIS, Nexis Library, Wires File; Virginia Executes Man Who Killed 5 in '84 Crime Spree, N.Y. TIMES, Mar. 20, 1993, at 7; see also Wilder Denies Clemency for Killer Facing Execution, WASH. POST, Mar. 16, 1993, at B4 ("Wilder said Poyner has not contended he is innocent but has raised 'esoteric arguments' about the method of execution and due process in his trials."); Man Executed, But Lawsuit Lives on, WASH. TIMES, Mar. 21, 1993, at A9 (explaining that although the Court refused the stay of execution, it did not refuse to consider the evidence on electrocution). Poyner's attorneys lost two additional appeals: (1) to videotape Poyner's execution so that it could be used later as evidence; and (2) to have a medical expert attend a post-execution autopsy. See Cox, supra.

FN849. See *Poyner v. Murray*, 113 S.Ct. 2397, 2398-99 (1993) (Justices Souter, Blackmun, and Stevens commenting on the denial of Syvasky Poyner's petition for writ of certiorari); Blum, supra note 70, at 413-21 (reviewing the history of public executions).

FN850. See Linda Himmelstein, Prosecutors Shift, Foil Challenge to Electrocution, LEGAL TIMES, Feb. 15, 1993, at 25 [hereinafter Himmelstein, Prosecutors Shift]; see also Motion to Prohibit the Imposition of the Death Penalty ¶ 2, *Virginia v. White*, Crim. No. 8129 (Cir.Ct. Loudoun County Aug. 28, 1992) (challenging Virginia's execution by electrocution as cruel and unusual punishment under the Eighth and Fourteenth Amendments). The prosecutors claimed that they had new evidence in White's case that tended to mitigate his participation in the murder of his step-grandfather. Himmelstein, supra, at 25. Their move avoided an "unusual" hearing in a Virginia state court at which a judge was supposed to have reviewed evidence of the effects of electrocution on the human body. See Linda Himmelstein, Is Death by Electrocution Cruel and Unusual?, LEGAL TIMES, Feb. 8, 1993, at 1; see also Telephone Interview with Jud Fischel, Attorney for Curtis White (Mar. 24, 1993).

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FN851. See Himelstein, Prosecutors Shift, *supra* note 850, at 25.

FN852. See MASUR, *supra* note 71, at 3 (explaining that most executions in this country were public until the start of the 19th century); see also ROBERT JOHNSON, DEATH WORK: A STUDY OF THE MODERN EXECUTION PROCESS 4-5 (1990) (noting that executions during the early modern period, 1500-1800, were characterized by "restrained ceremony" in contrast to those occurring in the modern period, after 1800, in which ceremony was replaced by bureaucratic procedure that occurred privately); Blum, *supra* note 70, at 413-26 (reviewing the history of public executions).

FN853. See THE DEATH PENALTY IN AMERICA 13 (Hugo A. Bedau ed., 3d ed. 1982). Even some of the final hangings involved spectacle. See *id.* For example, over 20,000 spectators came from several states to witness the 1936 hanging of Rainey Bethea in Owensboro, Kentucky. *Id.* A journalist described another spectacle that developed for a 1923 hanging in DeLand, Florida. See Rose Falls Bres, The Charge, Sentence and Execution of Charles Browne Perelli, WOMEN LAWS. J., Apr. 1927, at 10, 14. More than 2,000 women, men, and children attended from surrounding towns on Florida's east coast, midstate, and nearby communities. See *id.* "It was a barbaric picnic party.... [I]n this execution there was the real hundred percent thrill of witnessing the twitching for nearly thirty minutes of a young man, hung by the neck by 'due process of law.'" *Id.*

FN854. See Gardner, *supra* note 395, at 118.

FN855. See generally Bedau, *supra* note 555, at 12-14 (discussing the end of public executions in the United States).

FN856. See *id.* at 14.

FN857. Far Worse Than Hanging, *supra* note 20, at 1.

FN858. See *id.*

FN859. See *supra* notes 63-68 and accompanying text; *supra* note 853.

FN860. See Barnett, *supra* note 3, at 1A. Reverend Ford, who witnessed the execution of Wilbert Lee Evans, described the experience: "There is an oddity to death in the death chamber.... Because everyone there is a mere mortal, the witnesses, the reporters writing everything down, the officials. It's a very barbaric act, and somehow it's all quite civilized and everyone knows their part." Brown, *supra* note 640, at B8.

FN861. See GEORGE V. BISHOP, EXECUTIONS: THE LEGAL WAYS OF DEATH 54 (1965) (emphasizing that an execution is an "impersonal operation," in which "[t]he public has no direct connection with the actual deed and desires to have none").

FN862. Jerome T. Tao, Note, First Amendment Analysis of State Regulations Prohibiting the Filming of Prisoner Executions, 60 GEO.WASH.L.REV. 1042, 1043 n. 15 (1992).

FN863. See Bassette Memorandum, *supra* note 542, at 15. For example, because the Commonwealth of Virginia prohibited the media from attending executions until 1988, one recently botched execution in Virginia had no publicity because no reporters were present. See *id.* at 16; *supra* notes 763-67 and accompanying text.

FN864. See, e.g., Jef I. Richards & R. Bruce Easter, Televising Executions: The High-Tech Alternative to Public Hangings, 40 UCLA L.REV. 381, 381-82 (1992); Bassette Memorandum, *supra* note 542, at 15 (citing Hearings on H.R.8424 et al. before Subcomm. No. 3 of the House Comm. on the Judiciary, 92d Cong., 2d Sess., 308 (1972)).

FN865. See, e.g., Richards & Easter, *supra* note 864; Dane A. Drobny, Note, Death TV: Media Access to Executions Under the First Amendment, 70 WASH.U.L.Q. 1179 (1992); Gil Santamarina, Note, The Case for Televised

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Executions, 11 CARDOZO ARTS & ENT.L.J. 101 (1992). In some cases, such as the gas chamber execution of Robert Alton Harris, courts have allowed an execution to be videotaped as possible evidence of cruelty. See *Fierro v. Gomez*, No. C-92-1482 MHP, 1993 WL 414673, at \*1 (N.D.Cal. Oct. 13, 1993). The court allowed Harris' execution to be videotaped, but it has not allowed anyone, as yet, to use it as evidence or even to view it. See *id.* In other cases, such as the hanging of Westley Allan Dodd, courts have found such evidence unnecessary. See *Campbell v. Blodgett*, 982 F.2d 1356, 1359-60 (9th Cir.1993); Hazelwood Interview, *supra* note 846.

FN866. See *Wilkerson v. Utah*, 99 U.S. 130, 136-37 (1878).

FN867. See COMMISSION REPORT, *supra* note 84.

FN868. See *id.* at 75-85.

FN869. N.H.REV.STAT.ANN. § 630:5(XIII)-(XIV) (Supp.1992). The New Hampshire statute provides: The punishment of death shall be inflicted by continuous, intravenous administration of a lethal quantity of an ultrashort-acting barbiturate in combination with a chemical paralytic agent until death.... The commissioner of corrections or his designee shall determine the substance or substances to be used and the procedure to be used in any execution, provided, however, that if for any reason the commissioner finds it to be impractical to carry out the punishment of death by administration of the required lethal substance or substances, the sentence of death may be carried out by hanging under the provisions of law for the death penalty by hanging in effect on December 31, 1986. *Id.*

FN870. MONT.CODE ANN. § 46-19-103(3) (1991). Montana's statute provides an option to the defendant: "The punishment of death must be inflicted by hanging the defendant by the neck until he is dead or, at the election of the defendant, by administration of a continuous, intravenous injection of a lethal quantity of an ultra-fast-acting barbiturate in combination with a chemical paralytic agent...." *Id.* A defendant who wants to choose lethal injection must make the choice at the hearing where the date of execution is determined; otherwise, the option to choose lethal injection is waived. See *id.*

FN871. WASH.REV.CODE ANN. § 10.95.180(1) (West 1990). The Washington statute provides: "The punishment of death ... shall be inflicted either by hanging by the neck or, at the election of the defendant, by intravenous injection of a substance or substances in a lethal quantity sufficient to cause death...." *Id.*

FN872. See *supra* note 869.

FN873. See *supra* notes 870-71.

FN874. *Campbell v. Blodgett*, 992 F.2d 984 (9th Cir.) (en banc), application to vacate remand dismissed, 113 S.Ct. 1965 (1993) (per curiam). See *infra* notes 925-35 and accompanying text.

FN875. See BERKSON, *supra* note 83, at 21; Michael A. Clark & Frederick C. Kerr, Unusual Hanging Deaths, 31 J. FORENSIC SCI. 747, 747 (1986).

FN876. See ROYAL COMMISSION REPORT, *supra* note 550, at 246.

FN877. See *id.*

FN878. See DRIMMER, *supra* note 503, at 127.

FN879. ROYAL COMMISSION REPORT, *supra* note 550, at 254.

FN880. See *supra* notes 63-77 and accompanying text.



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FN881. ROYAL COMMISSION REPORT, *supra* note 550, at 253-56.

FN882. DRIMMER, *supra* note 503, at 128.

FN883. See *id.*; ROYAL COMMISSION REPORT, *supra* note 550, at 250, 254.

FN884. See DRIMMER, *supra* note 503, at 128; JACK KEVORKIAN, PRESCRIPTION: MEDICIDE 58 (1991).

FN885. See DRIMMER, *supra* note 503, at 128; KEVORKIAN, *supra* note 884, at 58-59.

FN886. Compare ARTHUR KOESTLER, REFLECTIONS ON HANGING 276-77 (Hutchinson & Co. 1970) (1955) (stating that whether a "violent shock" such as the improved type of hanging is always followed by instantaneous unconsciousness is not certain and that an effectual breaking of the neck depends on the skill of the hangman) with TEETERS & HEDBLUM, *supra* note 64, at 154 (explaining that "[p]ractically all of the evidence adduced indicates that hanging, if properly done, is painless" in that unconsciousness results when the body drops, even though death may not follow for several minutes thereafter, and explaining that the degree of suffering involved also depends on the competency of the procedure).

FN887. See *supra* notes 282-83 and accompanying text.

FN888. TEETERS & HEDBLUM, *supra* note 64, at 3.

FN889. See DRIMMER, *supra* note 503, at 130-31.

FN890. TEETERS & HEDBLUM, *supra* note 64, at 156-57.

FN891. *Id.* at 186.

FN892. See DRIMMER, *supra* note 503, at 132.

FN893. See *id.* When Alexander Jefferson was hanged using this method in Brooklyn, New York, in 1884, he strangled for eight minutes while trying to loosen the noose and reaching out to witnesses to help him. *Id.*

FN894. *Id.* at 133-34.

FN895. *Id.*

FN896. Lehman, *supra* note 494, at 29.

FN897. *Id.*

FN898. Gardner, *supra* note 395, at 121.

FN899. A Bill to Abolish the Death Penalty Under All Laws of the United States, and for Other Purposes: Hearings on S.1760 Before the Subcomm. on Criminal Laws and Procedures of the Senate Comm. on the Judiciary, 90th Cong., 2d Sess. 19-20 (1968) (statement of Clinton T. Duffy).

FN900. See DRIMMER, *supra* note 503, at 133.

FN901. *Id.*

FN902. Lehman, *supra* note 494, at 29.

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FN903. See *id.* According to Fred S. Silverman, Delaware's Chief Deputy Attorney General, "hangmen are a dying breed." Hinds, *supra* note 496, at 1. He stated that the only experienced hangman known lives in the backwoods of Canada and "has not responded to notes left on a tree stump for him by the local authorities." *Id.*

FN904. See TEETERS & HEDBLUM, *supra* note 64, at 154.

FN905. See BOWERS ET AL., *supra* note 491, at 8-10.

FN906. Gardner, *supra* note 395, at 122.

FN907. *Id.* at 119 n. 166. These states were Delaware, Idaho, Kansas, Montana, New Hampshire, Utah, and Washington. *Id.*

FN908. See *supra* notes 869-71 and accompanying text.

FN909. See Gardner, *supra* note 395, at 122.

FN910. See Timothy Egan, For First Time Since '65 a State Uses Its Gallows, N.Y. TIMES, Jan. 6, 1993, at A10 [hereinafter Egan, State Uses Gallows]; see also Timothy Egan, Illusions Are Also Left Dead As Child-Killer Awaits Noose, N.Y. TIMES, Dec. 29, 1992, at A1 (describing Dodd's crimes and life). Hanging has been used in each of the 73 executions in Washington State's history. See Egan, State Uses Gallows, *supra*, at A10.

FN911. Egan, State Uses Gallows, *supra* note 910, at A10.

FN912. *Id.*

FN913. *Id.*

FN914. *Id.*

FN915. *Id.*

FN916. See *id.*

FN917. *Id.*

FN918. See Dodd Probably Didn't Suffer in Hanging, Autopsy Says, UPI, Jan. 6, 1993, available in LEXIS, Nexis Library, Wires File. The Ninth Circuit denied a motion to videotape Dodd's execution to provide evidence for a hearing on whether hanging is cruel or unusual punishment. *Campbell v. Blodgett*, 982 F.2d 1356, 1358-60 (9th Cir.1993).

FN919. Coroner Concludes Murderer Felt Little Pain When Hanged, N.Y. TIMES, Jan. 10, 1993, § 1, at 23.

FN920. *Id.*

FN921. *Id.*

FN922. See *id.*

FN923. Dodd Didn't Suffer, *supra* note 918.

FN924. Murderer Felt Little Pain, *supra* note 919, at 23.

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(Cite as: 35 Wm. &amp; Mary L. Rev. 551, \*692)

FN925. *Campbell v. Blodgett*, 992 F.2d 984 (9th Cir.1993), application to vacate remand dismissed, 113 S.Ct. 1965 (1993) (per curiam).

FN926. See Supplemental Brief of Appellant at 1, *Campbell v. Blodgett*, No. 89-35210 (9th Cir. Sept. 27, 1993).

FN927. See *id.* at 2.

FN928. The evidence must include facts on (1) the executed person's weight, (2) the length the person dropped, and (3) the width of the rope used. See *id.* at 1.

FN929. See *id.* at 5.

FN930. See *id.* at 7.

FN931. See *id.* at 9-10.

FN932. See *id.* at 11.

FN933. See *id.* at 26-31.

FN934. See *id.* at 50-54.

FN935. See *id.* at 54-58.

FN936. Shooting was formerly the military's method of executing those who engaged in desertion, mutiny, or other types of military offenses. *DRIMMER*, *supra* note 503, at 89. Of the 40,000 servicemen who deserted during World War II, only 49 (some of them officers) received death sentences for desertion, and only one, Private Donald Edward Slovik, was actually executed. *Id.* at 106-07. Private Slovik's desertion lasted one day, after which he turned himself in. *Id.* at 108. Currently, a "handful" of individuals in the military are eligible for the death penalty, although the military's last execution was in 1961. See Henry J. Reske, *First Death Penalty Under New Law*, A.B.A.J., Aug. 1991, at 24.

FN937. IDAHO CODE § 19-2716 (1987). The Idaho statute provides: "The punishment of death shall be inflicted by continuous, intravenous administration of a lethal quantity of an ultra-short-acting barbiturate [sic] in combination with a chemical paralytic agent until death...." *Id.* The director of the department of corrections will decide which substances and procedures will be used. See *id.* However, in any case where the director finds it to be impractical to carry out the punishment of death by administration of the required lethal substance or substances for the reason that it is not reasonably possible to obtain expert technical assistance, should such be necessary to assure that infliction of death by administration of such substance or substances can be carried out in a manner which causes death without unnecessary suffering, the sentence of death may be carried out by firing squad. *Id.*

FN938. UTAH CODE ANN. § 77-18-5.5 (1990). The Utah statute provides that [w]hen a person is convicted of a capital offense and the judgment of death has been imposed, the defendant is entitled to select, at the time of sentencing, either a firing squad or a lethal intravenous injection as the method of execution. If the defendant does not indicate a preference at that time to the court, the judgment of death shall be executed by lethal intravenous injection. *Id.*

FN939. See *id.*; IDAHO CODE § 19-2716 (1987).

FN940. See *DRIMMER*, *supra* note 503, at 96-99. When Nevada was again ready to execute in 1924, it used lethal gas. *Id.*

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(Cite as: 35 Wm. & Mary L. Rev. 551, \*692)

FN941. *Id.* at 91. For a history of shooting in Utah, see Gina Berriault, *The Last Firing Squad*, *ESQUIRE*, June 1966, at 88. For a discussion of both its history and current use, see L. KAY GILLESPIE, *THE UNFORGIVEN: UTAH'S EXECUTED MEN* (1991).

FN942. *DRIMMER*, *supra* note 503, at 91.

FN943. *Id.*

FN944. *Id.*

FN945. *Id.*

FN946. Berriault, *supra* note 941, at 90.

FN947. ROYAL COMMISSION REPORT, *supra* note 550, at 249.

FN948. Telephone Interview with David Franchina, Assistant Director, Department of Corrections, Murray, Utah (July 17, 1992); see also *DRIMMER*, *supra* note 503, at 117.

FN949. See Phillips H. Lord, *Public Guinea Pig No. 1*, *SCRIBNER'S COMMENTATOR* 94, 94-98 (1940).

FN950. *Id.*

FN951. *Id.*

FN952. *Id.*

FN953. See *DRIMMER*, *supra* note 503, at 117.

FN954. See Gardner, *supra* note 395, at 123-24.

FN955. *Id.* at 24.

FN956. *Id.*

FN957. *Id.*

FN958. *Id.*

FN959. See *id.*

FN960. See WELSH S. WHITE, *THE DEATH PENALTY IN THE NINETIES* 24 (1991).

FN961. See Hinds, *supra* note 496, at 1.

FN962. Cf. CHARLES BLACK, *CAPITAL PUNISHMENT: THE INEVITABILITY OF CAPRICE AND MISTAKE* 9-22 (1974) (supporting the thesis that the death penalty cannot be imposed without considerable degrees of arbitrariness and mistake in light of the limitations both of people and their institutions).

FN963. See *supra* notes 33-34 and accompanying text.

FN964. Lethal injection was favored by the great majority (84%) of voters in one survey. See Carla McClain, *Arizona*

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Gas Chamber Stays, GANNETT NEWS SERV., Apr. 7, 1992, available in LEXIS, Nexis Library, Wires File. This percentage was somewhat lower in a Los Angeles Times poll taken April 23-26, 1992. See George Skelton, Death Penalty Still Strong in State, L.A. TIMES, Apr. 29, 1992, at A1, A18. In the poll, a sample of 1,395 Californians responded in the following way to the question, "What is the method of execution you prefer?"

Lethal injection ..	63%
Gas chamber .....	12%
Electric chair .....	4%
Firing squad .....	3%
Hanging .....	2%
Other/Don't know ..	12%
None .....	4%

Id. The sample consisted of registered voters statewide. Id. The margin of error was plus-or-minus three percentage points. Id.

FN965. See E.E. REYNOLDS, THE LIFE AND DEATH OF SIR THOMAS MORE 376-78 (1978); RAYMOND W. CHAMBERS, THOMAS MORE 348-50 (1935). Is the State supreme, or is there a moral law, above the laws which the State makes? The Utopians placed the rights of the State very high; the State might forbid propaganda and impose silence; nevertheless they recognized that there was a power above the State, the man "in whom remaineth no further fear than of the laws" might not be a citizen of Utopia. Id. at 350.

END OF DOCUMENT

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**COURT OF COMMON PLEAS, CLERMONT COUNTY, OHIO**

STATE OF OHIO )

State of Ohio v. Jesse J. Cowans

CLERMONT COUNTY )

Case No. 96CR005394

**AFFIDAVIT OF JEFFREY L. SMALLDON, PH.D.**

I, Dr. Jeffrey L. Smalldon, after being duly cautioned and sworn according to law, depose and state the following:

1. I am a psychologist licensed to practice in the state of Ohio. My professional practice is located at 5151 Reed Road, Suite A-211, Columbus, Ohio 43220. I received my Ph.D. from The Ohio State University in 1989, and I have been licensed (#4376) in Ohio to practice independently since 1990. I would estimate that since receiving my Ph.D., I have conducted clinical, forensic, and neuropsychological evaluations of well in excess of one thousand individuals.
2. One area of practice in which I have sought and obtained specialized training, knowledge, skill, and experience is forensic clinical and neuropsychological assessment. I am asked frequently to evaluate individuals who have been indicted or convicted on capital murder charges, and to date I have provided one or another kind of consultation on more than one hundred death penalty cases.





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Of course capital case consultation is an area of specialized practice even within the sub-specialty of forensic psychology, and typically there are relatively few psychologists in any particular jurisdiction with the training and experience to provide it. I have been qualified as an expert in the areas of forensic and clinical psychology, and neuropsychological assessment, in many different jurisdictions throughout Ohio. A copy of curriculum vita is attached.

3. I was retained in January of 1997 by trial counsel for Jessie James Cowans, who at the time was housed in the Clermont County Jail while awaiting trial on a charge of aggravated murder with specifications. The request from his attorneys, Bruce S. Wallace, Esq., and Michael P. Kelly, Esq., was that I conduct a clinical and, if I deemed it necessary, a neuropsychological assessment of their client with an eye toward being able to provide them with input about any mental health issues with relevance either for their trial strategy or for their presentation of mitigation evidence at a sentencing hearing in the event that Mr. Cowans was found guilty as charged.
4. In order to complete my consultation, I conducted a three-part clinical interview with Mr. Cowans during which I made inquiry into various aspects of his psychosocial history, including his developmental years and his lengthy period of prior incarceration. In all, I spent approximately 9-10 hours of face-to-face time with him.

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5. In addition to the clinical interview/s, I administered a wide-ranging battery of psychological and neuropsychological tests/assessment procedures. Included were the following:

- Wechsler Adult Intelligence Scale-Revised (WAIS-R)
- Wide Range Achievement Test-Revision 3 (WRAT-3)
- Sensory Perceptual Examination
- Bender Visual Motor Gestalt Test
- Rey's 15-Item Visual Memory Test
- Hand Dynamometer
- Finger Oscillation Test
- Trail Making Test (Parts A and B)
- Controlled Oral Word Association Test
- Booklet Category Test
- Seashore Rhythm Test
- Speech Sounds Perception Test
- Tactual Performance Test
- Aphasia Screening Test
- Rotter Incomplete Sentences Blank
- Minnesota Multiphasic Personality Inventory-2 (MMPI-2)
- Thematic Apperception Test
- House-Tree-Person

6. I also sought and obtained information from a number of different collateral sources, among them Judy Cowans, Jessie's wife of seven years; Delores Cowans, his older sister; Sharon Norburg, a former foster parent with whom Jessie lived on two separate occasions as a teenager; Robert Conley, who became acquainted with Jessie and other members of the Cowans family through the Big Brothers program when Jessie was a youngster; and Steve Schlechty, a clergyman who had begun seeing Jessie at the Clermont County Jail on a weekly basis in September of 1996, and who was continuing to see him when we spoke in April of 1997.

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7. I attempted, with very limited success, to elicit information through other members of Jessie's immediate family. His brother Paul declined my request for an interview, as did his brother Billy. I did, however, speak with James F. Crates, the mitigation specialist who had been retained by Mr. Cowans' attorneys to assist with piecing together as detailed a psychosocial history as possible, after Mr. Crates had spoken with Billy, as well as with another brother, Earl.
8. As part of my consultation, I also reviewed and considered an assortment of background records that were provided to me either by counsel or by Mr. Crates. Included were Ohio Department of Rehabilitation and Correction records pertaining to Mr. Cowans' lengthy period of prior incarceration; juvenile court and child welfare records, some of them pertaining specifically to Jessie and some of them pertaining to other members of the Cowans family (especially Jessie's younger brother Tim); records from the Clermont County Recovery Center, an agency through which Jessie received treatment services beginning in 1996 as a condition of his parole from prison; and a collection of newspaper clippings pertaining to the instant case.
9. There emerged from the various collateral interviews that I conducted a fairly consistent portrait of Jessie as an emotionally immature, impulsive, hot-tempered, and extremely insecure young man who had never been adequately socialized. The 17th of 18 children in his family of origin, he was, according to all available accounts, basically left to fend for himself by the time he was about to enter adolescence. His father, a physically, mentally, and emotionally abusive "preacher" who regularly

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terrorized members of the family and kept the rattlesnakes and copperheads that he used for his church services in the family's bathtub, died when Jessie was about 12 years of age; his mother died about two years later.

10. Jessie's wife Judy, who had married him in 1990 but was separated from him at the time of his arrest on the instant charge, described her husband to me as "almost overpoweringly" desperate for friendship and approval from others. At one point she remarked to me, "Jessie never grew up!" She also described on Jessie's part an almost childlike love for and attachment to animals, and a strong interest in trying to help children who came from disadvantaged backgrounds. She recounted many incidents where she had observed Jessie crying almost hysterically, typically responding to her attempts to comfort him by saying that he did not want anyone, her included, to feel sorry for him.
11. She added, however, "I knew what his background was like." Based not only on information that she heard from Jessie, but also on things that she had been told by other members of the Cowans family, it had always been her impression that Jessie's father "must have been the meanest man who ever walked the face of the earth."
12. She recalled during our discussion one occasion when she explicitly asked Jessie whether there had been any incest among members of the very large Cowans family. His response had been to "just clam up on [her]," refusing to discuss the subject. He did not, however, issue any kind of denial.

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13. Delores Cowans, Jessie's older sister (by about 15 years), indicated during my interview with her that she had gotten married when she was only 16, mainly as a route of escape out of the family home. She recalled her father as a moonshine-making, brutal "Holy Roller" who kept rattlesnakes and copperheads in the family's Over the Rhine residence in downtown Cincinnati, and who would regularly beat all the children for an infraction committed by only one of them. "He didn't whip us; he'd beat us," she recalled, adding, "He'd always get us on the weekends." He was particularly cruel when he drank ("very, very evil," as she put it).
14. She recalled how her father literally threw her brother Floyd out on the street and told him never to return after Floyd had tried to intervene when he was beating their mother; and she also recalled the numerous occasions when he would beat their mom almost to the point of unrecognizability -- to the point, in fact, where it appeared as though "a lion had got hold of her!"
15. According to Delores, for all practical purposes their father left the family household when Jesse would have been only about 7 or 8 years of age. As I understand it, he married another woman some years prior to his death in 1972 or 1973.
16. She described the family crucible in which Jessie was raised as utterly chaotic, at one point suggesting that as the second youngest of 18 children, Jessie basically "got lost in the rush." She recalled how terrified the children were of their father, remarking at one point that nearly all of the Cowans siblings wet their bed, typically preferring to

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remain in the room they shared -- even if it meant lying in a soaking wet bed -- to risking their father's wrath with a trip to the bathroom.

17. Although she refused to provide any explicit detail, Delores made it clear during my interview with her that there was rampant sexual abuse and incest among members of the Cowans family.
18. Robert Conley, who as noted above first came into contact with Jessie and other members of Jessie's family through the Big Brothers program, recalled during my interview with him that he saw Jessie at least monthly for a period lasting between four and five years. He remembers the various dwellings where the huge Cowans family lived during that period as "dumps" and "rat-traps."
19. To him at least, it seemed as though Jessie grew up "a textbook victim." He recalls how Jessie was basically turned loose to run the poverty-stricken downtown Cincinnati streets without ever having been taught even the most basic lessons about personal responsibility. "You could predict what would happen" in the lives of the younger Cowans siblings, he says, adding, "I still feel guilty to this day that I wasn't able to find a way to help [Jessie] turn his life around."
20. Recalling what Jessie was like when he first got to know him, he says, "He was great! Fun to be around....He had the biggest belly laugh you've ever [heard]!" He recalls, too, how polite and kind Jessie was to his (Bob's) wife after he eventually married, and how desperate Jessie always seemed for any kind of positive feedback from other



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people. He also remembers Jessie as having been a "great" babysitter for his and his wife's young child.

21. Sharon Norburg and her husband Frank served as temporary foster parents for Jessie during two separate periods when he was a teenager. She recalls that when she first met Jessie, at around the time of his 15th birthday, he was already so far behind his classmates that he felt embarrassed to even attend school. She recalls, too, how profoundly insecure he was, remarking that his almost reflexive response, even to relatively minor criticism, was, "You don't like me." Basically unsocialized even though by that time in his mid-teens, he was very preoccupied with feelings of inadequacy, and he had never learned to tolerate frustration or to delay gratification.
22. "We really liked Jessie," she recalls, adding, however, that no matter what she and her husband tried, it seemed that he just "wouldn't cooperate." Still, "Almost everyone liked [Jessie]." She never perceived him as a physically aggressive youth, although he could certainly be stubborn and defiant. She remembers how reluctant he always was to say much of anything about his family or his background. She remembers, too, how sympathetic he always was to anyone who he perceived as being disadvantaged or in pain, remarking toward the conclusion of our interview that he could not bear to even be present in the same room when another child was being spanked.
23. As noted above, Steve Schlechty had been seeing Jessie weekly through his jail-based ministry when I spoke with him in early-April of 1997. He remarked during my

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interview with him on how polite and considerate Jessie always was during their meetings, and on how conscientiously he participated in their Bible study.

24. He mentioned spontaneously that in the seven years that he had spent ministering to men in jail, he had met plenty of con men who had attempted to use him for one purpose or another. Of Jessie he noted, "He's never asked anything of me -- and that's rare," adding that Jessie had never even approached him about the possibility of testifying on his behalf at either the guilt/innocence or mitigation phase of his trial.
25. Based on my review of the background records identified above, I would have been prepared, had Mr. Cowans permitted my testimony at the penalty phase of his trial, to offer the triers of fact some additional third-party evidence to corroborate the accounts offered not only by Jessie himself but also by a number of different collateral informants about the chaotic environment in which Jessie was raised.
26. For example, I would have cited a 1976 Hamilton County Juvenile Court report pertaining to Jessie's younger brother Tim which includes the following descriptive statements: "The social history indicates a lack of discipline within the Cowans family with all but one of their...children having had contact with the Juvenile Court....Overall, Tim Cowans...has never had a stable home situation."
27. I would also have cited this excerpt, again written in 1976, from a report composed by Tim Cowans' probation officer: "This worker has known the Cowans family for approximately three years. While both of the parents were alive, there was very little discipline or any sort of guidance given to any of the children in this home. All of the

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children within this home, except one, have gone through the Hamilton County Juvenile Court. Most of the older brothers have gone on to be institutionalized in Adult Prison facilities."

28. A 1978 report, again centering on the case of Tim Cowans, that was composed by staff from the Child Study Center in Columbus, includes these statements: "The sum total of [Tim's] past life seems to have provided [him] with very little security, emotional support, or feelings of warmth or affection. These deficits have resulted in a very emotionally immature young man who feels totally abandoned....It appears obvious to this worker that [Tim] is quite suspicious of adults and is extremely reluctant to invest himself in developing any emotional attachments to others. [He] appears to be an extremely insecure young man who has very little trust in the ability of adults to supply his basic needs. This appears to be the result of his past very inconsistent and at times depriving background....As the court is assuredly aware Timothy has no intact family to speak of....[He] seems to have little concept of what a family is. He knows that he is missing something but is unsure of exactly what a family provides....At this point the only close significant person to Timothy is his brother Jessie."
29. I also would have been in a position to review during my testimony the findings from any number of prior psychological evaluations that had been performed on Jessie throughout the period of his prior incarceration. Results from these previous assessments would have been helpful as a further means of corroborating my own clinical impressions of Jessie as an emotionally immature, insecure, highly self-focusing,

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and impulsive young man who, in spite of his physical maturity, remained, in many respects, unsocialized as the result of his extremely deprived background.

30. To say that Mr. Cowans himself was reluctant to provide me with much in the way of detail about the circumstances of his developmental years would be to considerably understate the case. Approximately fifteen minutes into my initial interview with him, just after he had described his father's regular use of razor straps and a belt to beat Jessie, his siblings, and his mother, he reached across the table, grabbed the paper on which I'd been taking notes, crumpled it up, and said, "Let's forget all that and just say that I grew up with a good family and that my parents did the best they could." Although he eventually agreed to return my note paper, he refused from that point on to answer, except in the most superficial and unrevealing way, my inquiries about the conditions under which he grew up. He also took active steps to try and prevent members of his family from discussing with me the rampant abuse and neglect which was present throughout his developmental years.
31. Repeatedly, he stated that his brothers and his sisters had been through enough, and that he would not be party -- even if it meant losing his life -- to an effort that would place his family in a negative light. Of course this attitude prevailed right up through the mitigation phase of his trial, when he adamantly refused his attorneys' repeated requests that he permit me to offer testimony about his background and his psychological makeup.

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32. Had I been permitted to testify at the mitigation phase of Mr. Cowans' trial, I would have described not only the chaotic circumstances of his early home life, but also the very frequent disruptions, many of them the result of family moves, in his educational history. I would have described how he completed just nine years of formal education before being sent away to prison -- a teenager among adults -- when he was seventeen years of age.
33. I would also have described his very extensive history of alcohol and drug use, both beginning before his tenth birthday. Jessie himself recalled that he would drink "whenever [he] could get it"; and a 1987 prison psychological evaluation quotes him as having said that as a teenager he would drink or otherwise ingest "anything that helped [him] escape reality." He reportedly began huffing lighter fluid and gasoline on a regular basis at around age 8. By the time he reached his teens, he was drinking very heavily on a regular basis, and also using a wide assortment of different drugs, including marijuana, Valium, LSD, and powder cocaine.
34. Despite the fact that he participated in AA during prison and then in alcoholism/substance abuse programming offered through the Clermont Recovery Center following his 1996 release, he again resumed at around that time his prior pattern of daily drinking and marijuana use.
35. Throughout my interviews and testing sessions with him, he came across as a distractible and impulsive but still well-motivated test subject who at all times struck me as determined to give his best effort. He would frequently become restless and fidgety

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during tasks that required patience, self-discipline, or introspection. His ability to tolerate frustration appeared to be quite poor, although at the same time he seemed eager for the opportunity to take on a new challenge. At all times he impressed me as far more interested in doing well and receiving positive feedback than he was in trying to manage the impression that he was making on the examiner. It did not appear as though he was motivated to try and exaggerate his areas of relative weakness.

36. Testing revealed an individual with overall intellectual functioning toward the lower end of the average range. There was a 13-point discrepancy between his Verbal and Performance IQ estimates, with the Verbal estimate being the lower one. His lowest verbal subtest score was on a subtest tapping abstract verbal concept formation. He also obtained relatively low scores on verbal subtests tapping, respectively, general fund of information, immediate recall for auditory stimuli, and the appreciation for matters of common sense/social judgment.
37. Hardly surprising in light of the known history, his scores on the Wide Range Achievement Test-Revision 3 (WRAT-3) suggest a very impoverished repertoire of basic academic skills. He recognizes words at about a 7th grade level; spells at about a 3rd grade level; and performs arithmetic calculations at about a 5th grade level.
38. Several aspects of the reported psychosocial history suggested the advisability of proceeding with a complete neuropsychological evaluation. Not only was there the history of extreme childhood deprivation, there was also the reported history of very extensive alcohol/drug abuse (including gas and lighter fluid huffing) and a reported



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history of multiple head traumas, at least one of which -- a 1989 motor vehicle collision -- allegedly involved loss of consciousness.

39. The neuropsychological evaluation did not, however, yield results suggestive of acquired brain impairment.
40. The results of personality testing that was completed as part of my consultation are consistent both with my own clinical impressions of Mr. Cowans and with prior psychological evaluations. Testing revealed Jessie to be an angry, rebellious, emotionally immature individual with low ego strength, pervasive social skill deficits, and a profoundly impaired ability to tolerate frustration.
41. Individuals whose MMPI-2 profiles resemble his in important respects typically have a long history of social maladjustment. They bridle under the restrictions placed upon them by other people, and by social institutions, and they typically lack a strong identification even with very widely adhered-to standards of social conduct. Non-reflective and impulsive, they often fail to adequately think through the long-range consequences of their decisions, and they frequently fashion for themselves a lifestyle that is dominated by stimulation-seeking and the relentless quest for short-term gratification. These individuals are often the products of highly chaotic family environments that did not provide opportunities for their development of stable, secure childhood attachments to their primary caretakers.
42. All of the information contained in this affidavit was available to me at the time of Mr. Cowans mitigation hearing and could have been presented to the triers of fact through

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my testimony. As noted previously, Mr. Cowans repeatedly refused his attorneys' request that he permit me to testify, couching his refusal in the explanation that he would rather die than subject his surviving family members to public humiliation or embarrassment.

43. In my opinion, the very rigid position that he took on this issue is best understood as a reflection of his severe character pathology. His is a consistently short-term orientation, and as a means of defense against his strong underlying feelings of inadequacy, he seeks out opportunities to posture before others as strong, determined, and immovable. So threatening to him are his largely-unacknowledged feelings of weakness and vulnerability that he is willing to go to the extreme of risking the loss of his own life if he perceives that doing so is necessary in order to maintain the illusory image of strength and bravado which he so desperately tries to project in his dealings with other people.
44. From a diagnostic perspective, I see him as having -- in addition to his history of alcohol dependence and polysubstance abuse -- an Antisocial Personality Disorder, with its roots extending back to the earliest period of his chaotic childhood.
45. Because the triers of fact at Mr. Cowans' trial were never afforded the opportunity to learn about all the factors in his personal history that contributed to the development of Jessie's severe character pathology, they were without information that in my opinion as a psychologist would have been absolutely essential to their statutorily-

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defined task of weighing mitigation against the aggravating factors proven by the State at trial in order to arrive at the most appropriate sentencing recommendation.

Further Affiant sayeth naught.

  
Dr. Jeffrey L. Smalldon

Sworn and subscribed before me this 9<sup>th</sup> day of May, 1998.

  
Notary Public

**Laney Jaye Hawkins**  
**Notary Public, State of Ohio**  
**My Commission Expires 11-14-00**

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**CURRICULUM VITA**

**Education**

Ph.D.	The Ohio State University (Psychology, 1989) <u>Clinical Training:</u> <ul style="list-style-type: none"><li>. Netcare Forensic Psychiatry Center (Supervisor: Kristen Haskins, Psy.D.)</li><li>. Timothy B. Moritz Forensic Psychiatry Center (Supervisor: Dan L. Davis, Ph.D.)</li><li>. David J. Tennenbaum, Ph.D., and Associates (Supervisor: David J. Tennenbaum, Ph.D., Forensic Diplomate, American Board of Professional Psychology)</li></ul> <u>Pre-Doctoral Internship:</u> Forensic Psychiatric Unit, Connecticut Valley Hospital; Middletown, CT (9/88 - 8/89)
M.H.A.	The George Washington University (Health Services Administration, 1982)
Post-Grad. Diploma	Trinity College, The University of Dublin (Modern Anglo-Irish Literature, 1979)
M.A.	Purdue University (English, 1976)
B.A.	Valparaiso University (English, 1975)

**Licensure**

License No. 4376; Ohio State Board of Psychology (1990)

**Recent Employment History**

1990-Present	Psychologist, Private Practice; David J. Tennenbaum, Ph.D., and Associates
1990-1991	Psychologist; Riverside Methodist Hospitals' Neurological Rehabilitation Center
1989-1990	Post-Doctoral Fellow, Riverside Methodist Hospitals' Neurological Rehabilitation Center (half-time)
1989-1990	Post-Doctoral Fellow, David J. Tennenbaum, Ph.D., and Associates (half-time)
1986-1988	Teaching Associate (Psychology); The Ohio State University
1983-1985	Vice President, Mental Health and Alcoholism Services; Riverside Methodist Hospitals; Columbus, Ohio

**Curriculum Vita (Continued)**

**Page 2**

**Professional Membership/Affiliations**

American Psychological Association (APA)  
Division 40 (Clinical Neuropsychology) of APA  
Division 41 (American Psychology - Law Society) of APA  
American College of Forensic Psychology  
National Academy of Neuropsychology  
Ohio Psychological Association  
Central Ohio Psychological Association  
Department of Psychiatry, Section of Psychology, Riverside Methodist Hospitals  
Adjunct Assistant Professor, Department of Psychology, The Ohio State University  
(graduate seminar in forensic psychological assessment)

**Selected Presentations**

- \* Understanding the Psychological Report in Child Custody Cases. Presentation to the Advanced Family Law Seminar sponsored by the Ohio CLE Institute, June, 1997.
- \* The Role of the Consulting Psychologist in Child Custody Cases. Presentation at the annual conference of the Ohio Association of Court Referees and Magistrates, September 1996.
- \* Criminal Defendants and the Lies They Tell; or, Crisis and the Urge to Rewrite History. Presentation at the annual conference sponsored by the National Association of Sentencing Advocates, May 1996
- \* Psychologists, Mitigation Specialists, and the Search for Meaning in Cases of Serial Murder. Presentation at the annual conference sponsored by the National Association of Sentencing Advocates, May 1995.
- \* Child Custody Evaluations: A Psychologist's Perspective. Presentation at the Family Law Seminars sponsored by the Ohio Academy of Trial Lawyers, (Columbus and Cleveland), March 1995.
- \* Issues in the Assessment of Child Sexual Abuse Allegations. Half-day continuing education workshop (with two co-presenters) for members of the Columbus Bar Association, September 1994.
- \* The Psychologist's Role in Child Custody Determinations. Presentation to members of the Columbus Bar Association, June 1993.
- \* A Stress Management Primer for Domestic Court Referees. Presentation at the annual conference of the Ohio Association of Court Referees and Magistrates, September 1994
- \* The Role of the Interpretive Psychologist in the Sentencing Phase of a Capital Murder Trial. Panel Participant at conference of the National Association of Sentencing Advocates, Indianapolis, Indiana, June 1993.
- \* Developmental Roots of Adult Personality Disorders. Workshop at conference of the National Association of Sentencing Advocates, Indianapolis, IN, June 1993.

## **Curriculum Vita (Continued)**

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- \* Antisocial Personality Disorder and Death Penalty Mitigation. Presentation at the Death Penalty Conference, Cleveland, Ohio, June 1993.
- \* Memory Loss in the Elderly. Riverside AdvantAge, June 1993.
- \* A Psychological Perspective on Serial Murder. Presentation at the Leonard Camera Rehabilitation Center, January 1992.
- \* Depression and the Elderly. Presentation for Riverside AdvantAge, December 1991.
- \* Serial Murder and the Social Audience. Featured guest on Fred Anderle's WOSU radio call-in-show, August 1991.
- \* Mental Status Evaluation of the Elderly. Continuing education presentation, Riverside Methodist Hospitals, September 1990.
- \* The Idea of Motiveless Murder and the Popular Imagination. Presentation at annual meeting of the American Popular Culture Association. Toronto, Canada, March 1990.
- \* The Social Construction of Interpersonal Violence. Invited symposium at Christ College, Valparaiso University, October 1989.
- \* An Interdisciplinary Perspective on the Social and Interpersonal Context of Episodic Violence. Invited symposium at Whiting Forensic Institute, Middletown, CT, August 1989.

### **Selected Areas of Professional Competence/Training/Interest**

- \* Competency to stand trial evaluations
- \* Criminal responsibility (sanity) evaluations
- \* Child custody evaluations
- \* Death penalty mitigation/case consultation (state and federal)
- \* Juvenile bindover assessments
- \* Expertise in process issues related to the investigation of child sexual abuse allegations
- \* Knowledge/experience in the assessment of violent criminal offenders
- \* Expertise in the study of multiple murder (including serial and mass homicide)
- \* Cognitive and personality assessment (adult and adolescent)

### **Relevant Professional Experience**

- \* Experience training Ohio State University graduate students in forensic psychological assessment
- \* Extensive experience providing consultation in capital murder cases (state and federal)
- \* Qualified as an expert witness in numerous jurisdictions throughout Ohio
- \* Frequent court-appointed consultation in child custody cases
- \* Consultation for both the prosecution and the defense in determinations of competency to stand trial, criminal responsibility, and the appropriateness of juvenile bindover
- \* Experience providing consultation to a large security and investigations firm
- \* Completion of the Basic and Advanced Workshops in Neuropsychology and Neuropsychological Assessment offered by Ralph M. Reitan and Associates
- \* Frequent attendance at both local and national professional workshops